

# **RECORD OF DECISION**

## **AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA**

### **NAVAL AIR STATION SOUTH WEYMOUTH WEYMOUTH, MASSACHUSETTS**

#### **BRAC PMO NORTHEAST U.S. NAVY**



**DECEMBER 2007**

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Naval Air Station South Weymouth  
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**PART 1—DECLARATION**

**I. SITE NAME AND LOCATION**

Naval Air Station South Weymouth  
1134 Main Street  
Weymouth, Massachusetts 02190  
National Priorities List No. MA2170022022  
Area of Concern 53 – Former Radio Transmitter Building Area

**II. STATEMENT OF BASIS AND PURPOSE**

This decision document presents the No Further Action decision for Area of Concern (AOC) 53 (the Former Radio Transmitter Building Area) at the former Naval Air Station (NAS) South Weymouth, Weymouth, Massachusetts. The decision was made in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC § 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300 *et seq.*, as amended. The regulatory program performed under the context of these combined laws and regulations is commonly referred to as “Superfund.”

This decision is based on the Administrative Record, which has been developed in accordance with Section 113(k) of CERCLA, and which is available for review at the Navy’s Caretaker Site Office (CSO) located at NAS South Weymouth, Weymouth, Massachusetts. Local to the site, public information repositories are also maintained at the Tufts Library in Weymouth, Massachusetts; the Abington Public Library in Abington, Massachusetts; the Hingham Public Library in Hingham, Massachusetts; and the Rockland Memorial Library in Rockland, Massachusetts. The Administrative Record Index (Appendix D) identifies each of the items comprising the Administrative Record upon which the selection of this decision is based.

This decision had been selected by the Navy and the U.S. Environmental Protection Agency (EPA). The Massachusetts Department of Environmental Protection (MassDEP) statement on the selected remedy is presented in Appendix A.

**III. DESCRIPTION OF THE SELECTED DECISION**

This Record of Decision (ROD) sets forth the No Further Action decision for AOC 53 (Former Radio Transmitter Building Area) at NAS South Weymouth.

The No Further Action decision for AOC 53 is based on the Navy’s successful completion of removal actions conducted at the site. Between 2002 and 2004, Navy conducted two removal actions and disposed of the excavated soil and sediment offsite at a licensed facility. Navy removed 118 tons of sediment with elevated levels of metals and polycyclic aromatic hydrocarbons (PAHs) from a stream bed. In the area of the Building 33 foundation, Navy removed 1,181 tons of soil containing elevated concentrations of PAHs. The likely source of the PAHs was a petroleum-containing above ground storage tank (AST) located in Building 33. Post-excavation sediment and soil sampling results confirmed that the cleanup goals at each location were achieved and that remaining concentrations were below cleanup goals. Analytical results for samples from areas not excavated were compared to various EPA and MassDEP risk screening criteria and were determined to pose no risk to human health or the environment. An evaluation of data collected during a 2005 supplemental investigation in one area

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determined there was no unacceptable risks. Based on these conclusions, the Navy has determined that the site does not pose an unacceptable risk to human health or the environment.

AOC 53 is 1 of 18 AOCs currently on record at NAS South Weymouth. AOC 53 has been addressed independently from the rest of NAS South Weymouth and, therefore, the Navy can proceed with closure of this site as soon as they have met the requirements of the Superfund process. The signing of this No Further Action ROD by the Navy and EPA Region 1 authorizes the completion of the Superfund process for AOC 53. The No Further Action decision for AOC 53 is not expected to have any impact on the strategy or progress for the rest of the environmental investigations at NAS South Weymouth.

**IV. STATUTORY DETERMINATIONS**

No further cleanup actions are necessary at AOC 53 under CERCLA to ensure protection of human health and the environment. Under CERCLA, if no unacceptable risks to human health or the environment are identified, then no further actions, investigations, or monitoring is required. The remedy completed for the site did not result in hazardous substances remaining on-site above levels that allow for unlimited use and unrestricted exposure; therefore, five-year reviews will not be required.

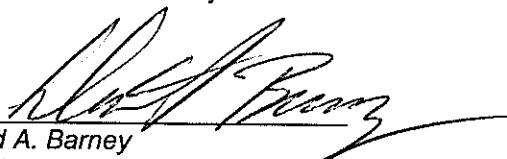
**V. AUTHORIZING SIGNATURES**

This ROD documents that No Further Action is necessary to ensure protection of human health and the environment for AOC 53 (Former Radio Transmitter Building Area) at the former NAS South Weymouth. This remedy was selected by the Navy and EPA. MassDEP's statement on the selected remedy is presented in Appendix A.

Concur and recommended for immediate implementation:

U.S. Department of the Navy

By:

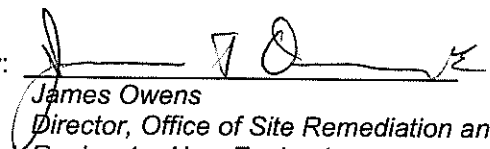
  
David A. Barney  
BRAC Environmental Coordinator  
Naval Air Station South Weymouth  
U.S. Navy

Date:

12/19/07

U.S. Environmental Protection Agency, Region 1

By:

  
James Owens  
Director, Office of Site Remediation and Restoration  
Region 1 – New England  
U.S. EPA

Date:

1/16/08

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**PART 2—DECISION SUMMARY**

**I. SITE NAME, LOCATION, AND DESCRIPTION**

The former NAS South Weymouth (the Base) was placed on the National Priorities List (NPL) in May 1994 by EPA pursuant to CERCLA. During its operational period (1940s to 1996), NAS South Weymouth was owned by the U.S. Government, and was operated by the Department of the Navy. The Base is located primarily in the Town of Weymouth, Massachusetts. Portions of NAS South Weymouth extend into the adjacent Towns of Abington and Rockland, Massachusetts.

The Department of the Navy is the lead agency, and EPA is the lead regulatory agency, for CERCLA activities at NAS South Weymouth. The U.S. Department of Defense is the sole source of environmental cleanup funding for the property. There are several operable units within the NAS South Weymouth NPL site (MA2170022022) that the Navy is addressing under CERCLA (Table 2-1). This ROD pertains to Area of Concern (AOC) 53, the Former Radio Transmitter Building Area.

AOC 53 is currently an open field and wetland area located in the northwest corner of the Base in the Town of Weymouth (Figure 2-1). The site covers approximately 5.7 acres and is the former location of the Radio Transmitter Building (Building 33).

**II. SITE HISTORY AND ENFORCEMENT ACTIVITIES**

**A. Site History**

NAS South Weymouth was constructed during the 1940s as an aircraft facility for dirigibles used to patrol the North Atlantic during World War II. The facility was closed at the end of the war and reopened in 1953 as a Naval Air Station for aviation training. NAS South Weymouth was in continuous use since that time as a Naval Air Reserve training facility until it was operationally closed on September 30, 1996 as part of the Base Realignment and Closure (BRAC) program. Administrative closure of the Base was completed in September 1997. The Navy has caretaker status of the Base, pending property transfer to the local redevelopment authority.

The former Radio Transmitter Building contained electrical equipment that was used to support antenna field activities. The building likely was demolished between 1978 and 1993 and may have housed polychlorinated biphenyl (PCB)-containing equipment, based on the function of the building. Interviews with NAS personnel during the *Phase I Environmental Baseline Survey* (EBS) (Stone & Webster, 1996) indicated that liquid and solid wastes may have been buried in the vicinity of the building.

Currently, the AOC 53 area is a large, open field that is bordered to the north and west by a paved road and to the east and south by wooded wetlands (Figure 2-2). A 15-foot wide ditch containing standing water is located just north and west of the road. The ditch banks are steep and are vegetated by shrubs. Between the open field and the wooded wetland to the south, there is a sharp drop in elevation. A shallow ditch runs along the base of the slope and appears to receive surface water runoff from the field).

**B. History of Site Investigations**

The following sections provide an overview of the completed investigations at AOC 53. Further details regarding the environmental investigations at the site are available for review in the *Phase II EBS Decision Document* (Stone & Webster, 2002b), the *Phase II EBS Field Report* (Stone & Webster, 2004a), the *EBS Phase II Project Memorandum* (Stone & Webster, 2004b), and the Closeout Report Action

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Memorandum (Tetra Tech EC, 2005) which also contains the removal action Closeout Report. EPA and MassDEP concurred with the Closeout Report in letters dated May 12, 2004 and June 22, 2005, respectively. Additional details regarding groundwater flow studies are available for review in the *Focused Groundwater Flow Direction Study for the Phase II EBS* (Stone & Webster, 2000b).

The various EBS investigations, removal actions, and other evaluations conducted at AOC 53 are described below, in chronological order. Sampling and removal action locations are shown in Figures 2-3 through 2-6. Sampling results are summarized in Tables 2-2 through 2-6.

#### Phase I EBS – 1995

The Navy performed a *Phase I EBS* (Stone & Webster, 1996) to assess the environmental condition of the Base property. Areas that were believed to require further investigation for potential contamination were designated as Review Item Areas (RIAs). The Former Radio Transmitter Building Area was designated as RIA 53.

#### Phase II EBS – 1998-1999

The Navy conducted a Phase II EBS investigation to assess the RIAs identified during the Phase I EBS. The individual RIAs were investigated as separate sites during the Phase II EBS and each site was sampled for potential contaminants. The results of the Phase II EBS investigation and the comparisons to screening benchmarks and background values were presented in decision documents for each RIA. The Phase II EBS results for RIA 53 were presented in the *Draft Phase II EBS Decision Document* (Stone & Webster, 2002b).

During the 1998-1999 Phase II EBS investigation at RIA 53, the Navy collected 14 surface soil samples (defined as the soil interval 0-1 foot below ground surface (bgs)) and 14 subsurface soil samples in the area where Building 33 had been located. Soil samples were analyzed for the Target Compound List (TCL), Target Analyte List (TAL), Extractable Petroleum Hydrocarbons (EPH), and Polycyclic Aromatic Hydrocarbons (PAHs). Four groundwater monitoring wells were installed, but only one groundwater sample was collected and was analyzed for TCL, TAL, EPH, and PAHs. In addition, three sediment and three surface water samples were collected from the wooded wetland area to the south of the former building. Sediment samples were analyzed for TCL, TAL, EPH, PAHs, total organic carbon (TOC) and moisture content. Surface water samples were analyzed for TCL, TAL, EPH, TOC, PAHs, and hardness. Of the four monitoring wells, two were installed upgradient of the former building and two were installed at downgradient locations. The locations of the monitoring wells (MW14-009, MW14-010, MW14-015, and MW14-019) were selected based on the results of a *Focused Groundwater Flow Direction Study* (Stone & Webster, 2000b) conducted by the Navy in support of the base-wide Phase II EBS. As part of this study, three piezometers (PZ14-01 through -03) also were installed at RIA 53 in 1998 and water levels were measured. Groundwater was found to flow in a northeast to southwest direction.

The Navy identified chemicals of potential concern (COPCs) based on comparisons of the samples' analytical results to EBS screening benchmarks (human health or ecological) as well as NAS South Weymouth background levels. The results were as follow:

- In surface soil, the identified ecological COPCs included two metals (chromium and zinc). The identified human health COPCs included six semi-volatile organic compound (SVOCs) (chrysene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene) and one pesticide (heptachlor epoxide). One volatile organic compound (VOC) (acetone) also was identified as a human health COPC in surface soil based on its concentration; however, acetone is a common laboratory contaminant and its detection in a site sample may not have represented actual site conditions. Although one PCB congener (Aroclor-1260) was detected at a concentration that slightly exceeded its human health benchmark screening level in

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surface soil, it was not retained as COPC because the concentration did not exceed the federal target cleanup level for PCBs in soil (1 mg/kg, per the Toxic Substances Control Act [TSCA], 15 U.S.C. s/s 2601 et seq., 1976).

- In subsurface soil, the identified human health COPCs included seven SVOCs (chrysene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene), three metals (aluminum, arsenic, beryllium), one pesticide (heptachlor epoxide), and C11-C22 aromatic hydrocarbons. Potential sources of the hydrocarbons detected in soils include petroleum-based fuels and lubricants. Hydrocarbons were not detected in groundwater, surface water, or sediment. The most likely source of the PAHs and hydrocarbons was a former petroleum above-ground storage tank (AST) reported located along the north wall of the Building 33 foundation (Figure 2-6). No ecological COPCs were identified.
- In surface water, the identified ecological COPCs included one SVOC (bis(2-ethylhexyl)phthalate) and six metals (aluminum, barium, cadmium, copper, lead, and zinc). No human health COPCs were identified.
- In sediment, the identified ecological COPCs included nine SVOCs (chrysene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene), three pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT, alpha-chlordane) and three metals (lead, mercury, selenium). No human health COPCs were identified.
- In groundwater, no human health or ecological COPCs were identified because no analyte concentrations exceeded both screening benchmarks and background levels.

Overall, based on the 1998-1999 sampling results, the Navy determined that additional sampling was warranted at RIA 53.

#### Phase II EBS Sampling – 2001

During two field mobilizations in May-June 2001 ("Mobe 1") and August 2001 ("Mobe 2"), the Navy collected surface and subsurface soil samples from four test pits (TP14-205, TP14-206, TP14-209, and TP14-211) and four soil borings (SB14-201 through -204), one of which was completed as a monitoring well (MW14-204). The soil samples from the test pits were analyzed for TCL, TAL, and PAHs. Surface soil samples collected from three borings were analyzed for PCBs. Surface and subsurface soil samples from the fourth boring were analyzed for TCL, TAL, and PAHs. An additional eight test pits (Figure 2-6) were completed to investigate subsurface conditions. Subsurface items that were uncovered in the test pits included the foundation of the former Building 33 and a sanitary sewer pipeline between former Building 33 and a ditch. The Navy also collected five surface water samples (SW14-201 through -205) and five sediment samples (SD14-201 through -205) from ditches and wet areas north, west, and south of the former building location. Sediment samples were analyzed for TCL, TAL, PAHs, TOC, moisture content, grain size, and acid volatile sulfides/simultaneously extracted metals (AVS/SEM). Surface water samples were analyzed for TCL, TAL (total and dissolved), and hardness. Groundwater samples were collected from the new monitoring well (MW14-204) as well as two existing monitoring wells (MW14-009 and MW14-019) and were analyzed for TCL, TAL, and PAHs.

The Navy identified COPCs based on comparisons of the samples' analytical results to EBS screening benchmarks (human health or ecological) as well as NAS South Weymouth background levels. As presented in the *Phase II EBS Field Report* (Stone & Webster, 2004), the 2001 field investigation had the following results:



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- In surface soil, the identified ecological COPCs included just one metal (chromium). No human health COPCs were identified.
- In subsurface soil, the identified human health COPCs included six SVOCs (chrysene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene), one metal (arsenic), and one pesticide (heptachlor epoxide). No ecological COPCs were identified.
- In sediment, the identified human health COPCs included six SVOCs (chrysene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene) and two metals (aluminum, thallium). The identified ecological COPCs included ten SVOCs (chrysene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene), four pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT, alpha chlordane) and two metals (lead, selenium).
- In surface water, the identified ecological COPCs included four metals (aluminum, copper, lead, and zinc) and one SVOC (bis(2-ethylhexyl)phthalate). No human health COPCs were identified.
- In groundwater, no human health or ecological COPCs were identified because no analyte concentrations exceeded both screening benchmarks and background levels.

During June 2001 and October 2001, the Navy also gauged groundwater levels. It was determined that a groundwater divide exists running north to south in the western third of the RIA. In the western part of RIA 53, groundwater flow was determined to be in a western direction, and in the eastern part of the site, groundwater flow was determined to be in a northeast direction.

#### Exploratory Sampling – 2002

In September 2002, the Navy conducted further exploratory sampling within a ditch near Building 33 to aid in the determination the extent of excavation needed for the stream. Five sediment samples were collected and analyzed for TAL metals. Nine metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, and zinc) exceeded both ecological benchmark screening levels and background values and were retained as COPCs (Stone & Webster, 2004b).

#### Removal Actions – 2002-2004

The Navy conducted removal actions at two locations at RIA 53 (Tetra Tech EC, 2005). One removal action was conducted within a ditch, where PAH and metals concentrations in sediment exceeded both benchmark screening levels and background levels. The other removal action was conducted at the foundation of the former Building 33, where petroleum-related COPCs in soil had been identified. Typically, sites at NAS South Weymouth with only petroleum contamination are addressed in accordance with the Massachusetts Contingency Plan (MCP); however, since the ditch removal action was already planned under CERCLA, the Navy also included the excavation at the building foundation under CERCLA in order to expedite the overall site cleanup. The removal actions were determined to be “time critical” due to the sampling results and the planned property transfer.

An initial excavation of the ditch was conducted from October 2002 to March 2003, based on the EBS Phase II and the 2002 exploratory sampling results. Post-excavation confirmatory samples were collected from the base and sidewalls of the stream excavation. Concentrations of some COPCs (primarily PAHs) exceeded cleanup and background levels, so additional rounds of excavation were conducted through February 2004, including a hot-spot removal north of the Building 33 foundation. In

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all, four rounds of excavation and confirmatory sampling were conducted, with a total of 118 tons of sediment removed from the ditch.

The removal action at the Building 33 foundation began in September 2002. The initial basis for the removal action was to target petroleum contamination identified within the building foundation. However, post-excavation confirmatory samples contained PAH concentrations that exceeded both benchmarks and background levels. Therefore, excavations continued beyond the extent of the foundation until COPC concentrations in confirmation samples achieved the target cleanup levels. A total of six rounds of excavation and post-excavation confirmatory sampling were conducted from September 2002 to January 2003, with a total of 1,181 tons of soil removed from the Building 33 foundation area. The final area of the excavation was approximately 5,200 sq. ft and the depth ranged from 4.5 to 5.5 ft bgs. The area was backfilled with common bankrun gravel and was graded to match the surrounding ground surface.

Technical Project Memorandum – 2004

The EBS Phase II Project Memorandum (Stone & Webster, 2004b), compared the analytical results from sampling conducted prior to the remedial actions to EBS benchmark and background values. Samples with analyte concentrations that exceeded both EBS benchmark and background values were identified. These sample locations were compared to the areas excavated during the remedial actions. The analytical results of samples from areas that were not included within the remedial action areas were evaluated for potential risk to human health and the environment.

For surface soil and sediment, analyte concentrations that exceeded EBS benchmarks and background values were shown not to pose a hazard to human health or the environment based on further comparisons to EPA Region IX Preliminary Remediation Goals (PRGs), MCP “Method 1 S-1/GW-1” standards (310 CMR 40.0975), Streamlined Ecological Risk Assessment (SERA) Surface Soil Screening Values, EPA draft Ecological Soil Screening Levels (Eco-SSLs), SERA Sediment Screening Values, consensus-based concentrations, EPA Region IV Ecological Screening Values for Sediments, EPA Office of Solid Waste and Emergency Response (OSWER) Ecotox Thresholds, MassDEP-identified Background Levels, and common “laboratory contaminants” (non-representative artifacts of analysis).

In surface water, concentrations of barium, lead, and zinc exceed ecological screening values, but there were no exceedances of these metals concentrations in corresponding sediment samples, and no other source for these metals has been identified. In subsurface soil, additional sampling in the vicinity of SB14-002 (3-5 ft bgs) was proposed to address exceedances of PAHs in this sample (see below).

At NAS South Weymouth, RIAs with COPCs that exceed either risk benchmarks or background values for more than one hazardous substance become CERCLA AOCs. Due to the identified potential risks to human health and the environment resulting from this screening process, RIA 53 was classified as a CERCLA AOC. AOC 53 is 1 of 18 CERCLA AOCs located at NAS South Weymouth.

Supplemental Investigation – 2005

In April 2005, the Navy returned to the location of the subsurface sample that had exceeded benchmark screening levels (SB14-002 (3-5)) in order to determine whether or not the PAHs previously detected in the sample had significant extent and risk. Three soil samples were collected surrounding the original sample location and the results were compared to cleanup levels and site background concentrations, where established. The Navy used MCP Method 1 S-1/GW-1 standards and background levels as cleanup goals. None of the sample results exceeded cleanup or background levels; therefore, no further excavation was required (Tetra Tech EC, 2005).

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**C. History of CERCLA Enforcement Activities**

In May 1994, NAS South Weymouth was listed on EPA's NPL, indicating that the NAS South Weymouth property was a priority for environmental investigation and cleanup. The Navy has conducted environmental studies and activities at NAS South Weymouth in accordance with CERCLA and the NCP. Based on the designation of NAS South Weymouth property as an NPL site, a Federal Facility Agreement was executed by the Navy and EPA, which became effective in April 2000. This agreement establishes the Navy as the lead agency for the investigation and cleanup of designated sites within NAS South Weymouth property, with EPA providing oversight. MassDEP is not a party to the Federal Facility Agreement. In accordance with CERCLA and the NCP, MassDEP has participated in ongoing discussions and strategy sessions, and provides oversight and guidance through their review of the Navy's Installation Restoration (IR) Program documents.

**III. COMMUNITY PARTICIPATION**

The Navy has worked to keep the community involved throughout the investigation process. The Navy has kept the community and other interested parties apprised of NAS South Weymouth environmental activities through informational meetings, fact sheets, press releases, public meetings, regular contact with local officials, and a public website. Also, the Navy meets on a regular basis to discuss the status and progress of the environmental programs with the Restoration Advisory Board (RAB), which is comprised of community leaders, government agency representatives, and local citizens who gather to discuss the progress of the environmental programs at NAS South Weymouth. Representatives from the Navy, EPA Region 1, MassDEP, and local government have attended the public meetings and hearings. The following is a brief chronology of public outreach efforts for AOC 53:

- In September 1995, the Navy initiated a series of public meetings, at which the RAB process was explained and community members were asked to join the RAB. A sufficient number of volunteers assembled, and RAB meetings began in March 1996. Since that time, RAB meetings have been held on a monthly or bi-monthly basis to keep the RAB and local community informed of the progress of the environmental investigations. The Navy has prepared and distributed minutes from each of the RAB meetings. Meeting minutes are available to the public on the Navy's public website for environmental activities at the former NAS South Weymouth (<http://nas-southweymouth.navy-env.com/>).
- In March 1996, the EPA awarded the North and South Rivers Watershed Association (NSRWA) a Technical Advisory Grant (TAG). This TAG had allowed the NSRWA to hire a Technical Advisor to review documents, attend meetings, and prepare evaluation reports. The Technical Advisor attended most RAB meetings and technical project meetings when the TAG was active.
- In July 1998, the Navy released a community relations plan that outlined a program to address community concerns and keep citizens informed about and involved in remedial activities.
- In May 1999, the DoD gave the RAB for NAS South Weymouth a Technical Assistance for Public Participation (TAPP) grant. This grant had allowed the RAB to obtain technical assistance from experts in the environmental field to help them understand the environmental cleanup programs at the Base.
- The Navy has distributed technical documents directly to the RAB members, including the EBS Decision Documents, the Closeout Report Action Memoranda, and field reports. Technical documents are also available at the information repositories listed below.

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- The Navy gave a formal presentation about AOC 53 during the December 2001 RAB meeting as well as periodic updates on the status of the site during various public RAB meetings.
- The Navy published a legal notice of the Proposed Plan for AOC 53 in the Patriot Ledger (July 2, 2007), the Abington-Rockland Mariner (July 6, 2007), and the Weymouth News (July 4, 2007). The notice announced the public comment period and the meeting date for the public information session and public hearing. Announcements about the meeting were posted at the town halls. The Navy distributed copies of the Proposed Plan to a mailing list of nearly 400 community members. In addition, the Navy made the Proposed Plan available to the public at several established Information Repositories (listed below) and the Navy's public website for environmental activities at the former NAS South Weymouth (<http://nas-southweymouth.navy-env.com/>).
- From July 2, 2007 to August 1, 2007, the Navy offered the Proposed Plan for public comment, in accordance with the requirements of the NCP and the CERCLA program at NAS South Weymouth. No written comments were received regarding AOC 53 during the public comment period.
- On July 19, 2007, the Navy held an informational meeting to present the Navy's Proposed Plan to the public. At this meeting, representatives from the Navy discussed the Proposed Plan and answered questions from the public. In addition, the Navy held a public hearing to accept oral comments on the Proposed Plan. A transcript of comments received at the public hearing is included as Appendix E.
- The Navy has provided responses to comments received at the public hearing and during the comment period in the Responsiveness Summary, which is included in Part 3 of this ROD.

In addition, the Navy has provided an index of the Administrative Record available for public review, which is formally maintained at the Navy's CSO at NAS South Weymouth, Weymouth, Massachusetts. Information repositories have also been established at several locations. Currently, information is available at the Tufts Library in Weymouth, Massachusetts; the Abington Public Library in Abington, Massachusetts; the Hingham Public Library in Hingham, Massachusetts; and the Rockland Memorial Library in Rockland, Massachusetts. The Administrative Record Index is included as Appendix D to this ROD.

#### **IV. SCOPE AND ROLE OF OPERABLE UNIT OR RESPONSE ACTION**

In addition to several CERCLA Operable Units, AOC 53 is 1 of 18 CERCLA AOCs identified at NAS South Weymouth (Table 2-1). In general, the Operable Units and AOCs at NAS South Weymouth progress through the CERCLA cleanup process independent of one another.

AOC 53 was originally identified in the Phase I EBS Report as RIA 53. An RIA is an area identified during the EBS that was believed to require further evaluation due to the potential for contamination. If environmental impacts are found based on sampling results, then the Navy addresses an RIA under the appropriate program. At NAS South Weymouth, the Navy has designated EBS RIAs as CERCLA AOCs when one or more CERCLA hazardous substances have been present in excess of human health or ecological risk benchmarks and background values. The Navy has then performed streamlined risk assessments or conducted removal actions at the various AOCs at NAS South Weymouth. At AOC 53, the Navy elected to conduct removal actions to address contaminants in soil and sediment.

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The ROD for AOC 53 is one component of the Superfund program at NAS South Weymouth. AOC 53 has proceeded on an independent track from the other Operable Units and AOCs in order to enable the Navy to expedite site closure and property transfer. The signing of this ROD by the Navy and EPA Region 1 indicates the completion of the Superfund process for AOC 53. No additional actions or investigations of AOC 53 are required under CERCLA. The selected No Further Action decision for AOC 53 is not expected to have an impact on the strategy or progress for the remaining environmental investigation sites at NAS South Weymouth. Additional details on the strategy and schedule for the remediation of the other Operable Units and AOCs at NAS South Weymouth are available in the Navy's Site Management Plan (Tetra Tech NUS, 2007).

## **V. SITE CHARACTERISTICS**

This section provides an overview of the initially suspected source of contamination, the investigations performed, the identified COPCs, and the analytical results for AOC 53. A description of the AOC 53 size, location, and environs is included in Section I of this Part of the ROD. The history of the various site investigations, removal actions and evaluations is described in Section II.B of this Part of the ROD. Full details regarding the soil investigations, removal actions and evaluations are available for review in the *Phase II EBS Decision Document* (Stone & Webster, 2002b), the *Phase II EBS Field Report* (Stone & Webster, 2004a), the *EBS Phase II Project Memorandum* (Stone & Webster, 2004b), the Closeout Report Action Memorandum (Tetra Tech EC, 2005), and the Closeout Report (Tetra Tech EC, 2005). Additional details regarding groundwater investigations are available for review in the *Focused Groundwater Flow Direction Study for the Phase II EBS* (Stone & Webster, 2000b).

The 1996 Phase I EBS identified the former Building 33 area as a potential source of contamination due to two independent reports (interviews with former base workers) of liquid and solid disposal in the vicinity of this area. During Phase II EBS activities in 1998/1999, the Navy collected surface soil, subsurface soil, and groundwater samples from the Building 33 area. In addition, three sediment and three surface water samples were collected from the wooded wetland area to the south of the former building location. EBS sampling locations are shown in Figure 2-3. Sample results are summarized below and in Tables 2-2 through 2-6. The sampling data were compared to NAS South Weymouth background levels and risk-based screening benchmarks for human and ecological receptors. In soil and sediment, SVOCs (primarily PAHs), metals, and pesticides were identified as COPCs. Elevated concentrations of C11-C22 aromatic hydrocarbons were also detected in soil. Potential sources of the hydrocarbons detected in soils include petroleum-based fuels and lubricants. The most likely source of the PAHs and hydrocarbons was a former petroleum AST reported located along the north wall of the Building 33 foundation (Figure 2-6). In surface water, one SVOC and metals were identified as COPCs. No human health or ecological COPCs were identified in groundwater. Overall, based on the 1998-1999 sampling results, the Navy determined that additional sampling was warranted at RIA 53.

In 2001, the Navy conducted additional surface soil, subsurface soil, groundwater, sediment, and surface water sampling, as well as eight test pits, at the site. Similar to the previous results, the Navy identified SVOCs (PAHs), metals, and pesticides as COPCs in soil and sediment, and one SVOC and metals as COPCs in surface water. No groundwater COPCs were identified.

In 2002, the Navy conducted further exploratory sampling of stream sediment in order to aid in the determination the extent of excavation needed in the stream.

Based on the EBS sampling results, the Navy conducted removal actions at two locations at AOC 53. One removal action was conducted at a ditch, where metals and PAH concentrations in sediment exceeded both benchmark screening levels and background levels. The other removal action was conducted at the foundation of the former Building 33, where petroleum-related COPCs in soil had been identified. Typically, sites at NAS South Weymouth with only petroleum contamination are addressed in

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accordance with the MCP; however, since the ditch removal action was already planned under CERCLA, the Navy also included the excavation at the building foundation under CERCLA in order to expedite the overall site cleanup. The removal actions were determined to be “time critical” due to the available sampling results and the planned property transfer.

The removal actions were completed in several phases between October 2002 and February 2004. Final confirmatory samples achieved the desired cleanup goals (the higher of MCP Method 1 S-1/GW-1 standards and background levels). In all, the Navy removed a total of 118 tons of sediment from the ditch and 1,181 tons of soil from the Building 33 foundation area. The building area was backfilled with common bankrun gravel and was graded to match the existing ground surface.

Analytical results for samples from areas not excavated were compared to various EPA and MassDEP risk screening criteria and were determined to pose no risk to human health or the environment. An evaluation of data collected during a 2005 supplemental investigation in one area determined there were no unacceptable risks. Based on these conclusions, the Navy has determined that the site does not pose an unacceptable risk to human health or the environment.

## **VI. CURRENT AND POTENTIAL FUTURE SITE RESOURCE USES**

NAS South Weymouth was operationally closed on September 30, 1996, and administratively closed on September 30, 1997. As such, past military operations conducted at the Base are no longer occurring. The Base is located within a residential/light commercial area.

Under current use of the Base, there are no regular activities occurring at AOC 53 and, thus, there is limited potential for current worker exposure. Human activity is limited to possible brush clearing during summer months. NAS South Weymouth is operationally closed.

The anticipated future use of the AOC 53 property is based on the zoning prescribed in the *Zoning and Land Use By-Laws for the Naval Air Station South Weymouth* (SSTTDC, 2005a), which has been approved by the townships of Weymouth, Abington, and Rockland. AOC 53 is zoned as “open space.” The open space zoning is intended for the preservation of large, contiguous wetland areas and open space for park land, active and passive recreation, reservations, community gardens, rivers and streams, and similar uses. The zoning may also encompass wetland resource areas, open space, and recreational areas where there are important public health, safety, and welfare interests in watershed and flood potential protection, preservation of wildlife habitat, and conservation of recreational land for resident use and enjoyment. No residential use is permitted under the open space zoning.

Groundwater at AOC 53 is not within a state-mapped, potentially productive aquifer zone, interim wellhead protection area (IWHPA), or Zone II area. Therefore, groundwater at AOC 53 is not considered to be part of a Potential Drinking Water Source Area.

## **VII. SUMMARY OF POTENTIAL SITE RISKS**

AOC 53 originally was identified in the *Phase I EBS Report* as RIA 53, an area requiring further evaluation due to the potential for contamination (i.e., alleged waste disposal). Under the Phase II EBS, soil, sediment, groundwater, and surface water samples were collected and analyzed for wide range of potential contaminants. The validated laboratory results were screened against background values for NAS South Weymouth, human health risk-based benchmarks, and ecological risk-based benchmarks.

The human health risk-based benchmarks used for the Phase II EBS are the most conservative (lowest) value under residential exposure scenarios provided in EPA Region III Risk Based Concentrations

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(RBCs) and MCP (310 CMR 40.0000) Method 1 standards, where applicable. The benchmark for each analyte was established as the lower value under residential land use scenarios (i.e., residential soil and tap water RBCs, or S-1/GW-1 values for soil and lowest of GW-1, GW-2 or GW-3 values for groundwater). Non-carcinogenic EPA RBC values were reduced by a factor of 10, as a further conservative measure to account for potential additive effects.

The screening indicated potential risks to health and the environment at AOC 53 associated with SVOCs, metals, and pesticides in soil and sediment. Groundwater was not identified as a medium of concern at AOC 53.

The Navy conducted removal actions at AOC 53 to excavate soil and sediment containing elevated concentrations of primarily SVOCs and metals. The Navy used MCP Method 1 S-1/GW-1 standards and background levels as cleanup goals. Confirmatory sampling data were collected at AOC 53. The final post-removal action COPC concentrations in soil and sediment achieved the target cleanup goals.

Environmental conditions at AOC 53 now are acceptable for unrestricted use (including residential), based on comparisons of the residual chemical constituents to risk-based federal screening criteria and state standards. AOC 53, in accordance with the current reuse plan, will be zoned for open space and, therefore, would be available for some recreational use. No additional measures are required at AOC 53 to ensure protection of human health and the environment.

#### **VIII. DOCUMENTATION OF NO SIGNIFICANT CHANGES**

The Navy issued a Proposed Plan for No Further Action for AOC 53 on July 2, 2007 for a 30-day public comment period. A public information session and a public hearing were held on July 19, 2007. The Navy reviewed the comments submitted during the public comment period (Appendix E). As summarized in the Responsiveness Summary (Part 3), it was determined that no significant changes to the decision, as originally identified in the Proposed Plan, were necessary. Therefore, No Further Action for AOC 53 will be implemented.

#### **IX. STATE ROLE**

MassDEP has reviewed the relevant site information to determine if the selected remedy is in compliance with applicable or relevant and appropriate state environmental and facility siting laws and regulations. MassDEP's statement on the selected remedy in this ROD is presented in Appendix A.

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**TABLE 2-1**

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN  
AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA  
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS  
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Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
West Gate Landfill	IR Program Site 1	1	WGL	Disposal area used for a variety of construction and demolition debris, municipal, and other waste materials.	PA, SI, RI, FS, PRAP, and ROD (including construction of a soil cover over the landfill, long-term monitoring, and institutional controls) completed.
Rubble Disposal Area (Upland)	IR Program Site 2	2	RDA	Disposal area used for primarily building demolition debris.	PA, SI, RI, FS, PRAP, ROD, Remedial Design, Remedial Action including excavation and offsite disposal of PCB-impacted material, construction of a soil cap for the landfill material, long-term monitoring, and institutional controls is completed and long-term monitoring is underway.
Small Landfill	IR Program Site 3	3	SL	Disposal area used primarily for concrete, metal, and wood.	PA, SI, RI, PRAP, and ROD (No Action with groundwater monitoring) completed. Monitoring program completed. Closure under MA Solid Waste Regulations is underway.
Fire Fighting Training Area	IR Program Site 4	4	FFTA	Area designated for dispensing fuels for igniting and extinguishing fires.	PA, SI, and RI completed. No FS required. Completed PRAP and No Action ROD. Further assessment is being conducted in accordance with the MCP (310 CMR 40.0000).
Tile Leach Field	IR Program Site 5	5	TLF	Sand bed used to receive and distribute treated industrial wastewater.	PA, SI, and RI completed. No FS required. PRAP and No Action ROD completed.
Fuel Farm	IR Program Site 6	Not applicable (no longer CERCLA)	None	Tank farm and fuel dispensing area.	Site was transferred into the MCP program based on exhibiting only fuel-related issues.
Sewage Treatment Plant	IR Program Site 7	7	STP	Wastewater treatment plant used primarily for domestic wastewater.	PA, SI, RI, and FS completed. PRAP issued August 2007. Preparing ROD.
Abandoned Bladder Tank Fuel Storage Area	IR Program Site 8	8	ABTFSA	Area in which aboveground tanks temporarily were stored in support of aircraft refueling training operations.	Closed. PA, SI, and RI completed. No FS necessary. Completed No Action PRAP and ROD.
Rubble Disposal Area	IR Program Site 2	9	RDA	Steep sloping area adjacent to the RDA.	Combined with Operable Unit 2. No separate actions being performed.



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**TABLE 2-1**

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN  
AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA  
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS  
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Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
Building 81	IR Program Site 9	10	None	Release of solvents from former motor pool.	Former MCP site moved to CERCLA program. Conducted <i>in situ</i> chemical oxidation pilot study for groundwater. RI sampling completed. Preparing RI report.
Building 82	IR Program Site 10	11	None	Release of solvents from former aircraft hangar operations.	Former MCP site moved to CERCLA program. RI sampling completed. Preparing RI report.
Solvent Release Area	IR Program Site 11	12	SRA	Release of solvents from unidentified source.	Former EBS background location moved to the CERCLA Program. Preparing RI report.
Hangar 1 Main Bay	AOC Hangar 1	None	None	Main building floor drains	Various Removal Action/TCRAs completed. Preparing PRAP.
Suspected TACAN Disposal Area	AOC 3	None	None	Pile of rubble, soil, and metal debris containing PAHs and polychlorinated biphenyls (PCBs).	EBS Phase I, EBS Phase II. TCRA completed in Fall 2001 for the removal of 51 tons of soil and debris. PRAP completed. Completed No Further Action ROD.
ATC abandoned septic system	AOC 4A	None	None	Alleged liquid and solid waste disposal to a septic system. Arsenic in adjacent forested wetland hydric soil (sediment) was detected at levels above background.	EBS Phase I, EBS Phase II. Conducted streamlined HHRA and ERA. Completed No Action PRAP and ROD.
Wyoming St. Area – Building 70	AOC 8	None	None	Remnants of Building 70 demolition. Building housed radar electronics. Elevated PCB concentrations in soil.	EBS Phase I, EBS Phase II. TCRA, and CRAM completed. Completed No Further Action PRAP and ROD.
Supply Warehouse	AOC 13	None	None	Former railroad loading and unloading area. PAHs and pesticides in soil.	EBS Phase I, EBS Phase II. Conducted HHRA on soil. Removal action completed in September 2001 (8 tons of soil containing PAHs removed). PRAP completed. Completed No Further Action ROD.
Water Tower Staining	AOC 14	None	None	Staining between Hortensphere and Water Tower. Former drum storage area. Chromium, lead, and PAHs in soil.	EBS Phase I, Phase II. Conducted HHRA. Preparing No Action PRAP.

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**TABLE 2-1**

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN  
AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA  
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS  
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Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
Water Tower	AOC 15	None	None	Possible lead paint in soil (paint chips from sandblasting of tower).	EBS Phase I, EBS Phase II. June 2000 TCRA addressed lead in soil (280 tons of soil removed). Additional removal in March 2002 (104 tons of soil) addressed elevated lead reported from adjacent AOC 14 sample. PRAP completed. Completed No Further Action ROD.
Pistol Range	AOC 35	None	None	Small arms ammunition rounds at historic Pistol Range.	EBS Phase I. EBS Phase II. Completed TCRA for lead in soil. Removed the de-armament embankment. Completed No Further Action PRAP and ROD.
Former Radio Transmitter Building Area	AOC 53	None	None	Alleged disposal area. Mainly PAHs and some inorganic constituents detected in sediment.	EBS Phase I, EBS Phase II, removal actions, and CRAM completed. Completed No Further Action PRAP and ROD.
Area North of Trotter Road - Antennae Field	AOC 55A	None	None	Seven antenna poles and associated copper cables.	Phase I EBS, Phase II EBS. Removal action in September 2002 removed antenna poles, platforms, grounding wires, and adjacent soil (840 tons of soil) to lower ecological risk. Completed No Further Action PRAP and ROD.
Area North of Trotter Road - Debris Area	AOC 55B	None	None	Solid waste disposal over a large, heavily wooded area.	Phase I EBS, Phase II EBS. Debris removal in 1999. Completed No Action PRAP and ROD.
Area North of Trotter Road - Pond Area	AOC 55C	None	None	Metallic debris in heavily wooded area and pond. Metals in soil and sediment.	Phase II EBS. Removal action may be conducted. Pending PRAP/ROD.
Area North of Trotter Road - Wetland Area	AOC 55D	None	None	Metals, PCBs exceed ecological benchmarks in surface water and sediment.	Formerly part of AOC 55B. Completed streamlined HHRA and ERA. Completed No Action PRAP and ROD.
East Mat Drainage Ditch	AOC 60	None	None	Discolored water and solid waste identified in drainage ditch.	Phase I EBS, Phase II EBS. Removal action conducted in December 2002 on the western portion of ditch as part of AOC 61 removal action. Further work underway.

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**TABLE 2-1**

**SUMMARY OF OPERABLE UNITS AND AREAS OF CONCERN  
AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA  
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS  
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Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of September 2007
TACAN Ditch	AOC 61	None	None	Discolored water in drainage ditch.	EBS Phase I, EBS Phase II. Completed Removal Action to address the TACAN Outfall drainage system, associated ditches, drainage swales, storm sewer lines, and catch basins in other areas at the Base. Cleaned the 60-in. storm drains and removed sediment in the TACAN ditch. Further work underway. Pending PRAP/ROD.
Hazardous Waste Storage Area	AOC 83	None	None	RCRA Closure. PCB in subsurface soil.	EBS Phase I, EBS Phase II. Completed HHRA. No Action PRAP in progress.
East Street Gate Area	AOC 100	None	None	Debris disposal area. Various inorganics exceeded background and ecological benchmarks for surface soil.	EBS Phase I, EBS Phase II. Removal action completed in Fall 2001 (1,194 tons of soil and debris). PRAP completed. Completed No Further Action ROD.

**NOTES:**

PA = Preliminary Assessment  
SI = Site Inspection  
RI = Remedial Investigation (Phase I and II)  
FS = Feasibility Study  
PRAP = Proposed Remedial Action Plan (or Proposed Plan)  
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act  
ROD = Record of Decision  
MCP = Massachusetts Contingency Plan  
TCRA = Time Critical Removal Action

AOC = Area of Concern.  
CMR = Code of Massachusetts Regulations.  
CRAM = Closeout Removal Action Memoranda  
RCRA = Resource Conservation and Recovery Act  
EBS = Environmental Baseline Survey  
HHRA = Human Health Risk Assessment  
ERA = Ecological Risk Assessment  
TACAN = Tactical Air Navigation

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TABLE 2-2

**PRE- AND POST-REMOVAL SURFACE SOIL SAMPLE RESULTS (DETECTED ANALYTES)**  
**COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED SCREENING BENCHMARKS**  
**AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA**  
**NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS**  
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Analyte	AOC 53		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels	Soil Clean-up Goals
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration*	EBS Human Health Soil Benchmark**	SERA Eco Soil Benchmark	Surface Soil Background	MCP S-1/GW-1 Standards
<b>Volatile Organic Compounds (mg/kg)</b>						
acetone	4.2 J	--	3	--	2.2	3
chloromethane	0.002 J	--	49	--	--	--
dichloromethane	0.0087 J	--	0.1	--	0.07	0.1
methylbenzene	0.002 J	--	90	--	0.008	--
<b>Semi-Volatile Organic Compounds (mg/kg)</b>						
Acenaphthene	1.4	--	20	--	0.21	20
Acenaphthylene	0.1	--	100	--	--	100
Anthracene	2.7	--	1000	--	0.17	1000
Benz(a)anthracene	7.6 J	--	0.7	--	0.81	0.7
Benzo(a)pyrene	5.7 J	--	0.087	--	1.82878	0.7
Benzo(b)fluoranthene	10 J	--	0.7	--	0.77	0.7
Benzo(g,h,i)perylene	4.5 J	--	1000	--	0.31	1000
Benzo(k)fluoranthene	3.9 J	--	7	--	2.7	7
Bis(2-ethylhexyl)phthalate	1.6	--	46	200	46	100
Carbazole	1.6	--	32	--	0.13	--
Chrysene	8.1 J	--	7	--	1.4	7
Dibenz(a,h)anthracene	0.28 J	--	0.087	--	0.096	0.7
Dibenzofuran	0.72	--	31	--	--	--
Fluoranthene	17	--	310	--	2.4	1000
Fluorene	1.4	--	310	30	--	400
Indeno(1,2,3-cd)pyrene	5.1 J	--	0.7	--	0.175	0.7
2-methylnaphthalene	0.12	--	4	--	--	4
Naphthalene	0.13	--	4	--	--	4
Phenanthrene	10	--	100	30	1.5	700
Pyrene	14 J	--	230	--	1.5	1000
<b>Petroleum Hydrocarbons (mg/kg)</b>						
C11-C22 aromatics	160 J	--	200	--	--	200
C19-C36 aliphatics	90	--	2500	--	--	2500
C9-C18 aliphatics	8.8 J	--	1000	--	--	1000
<b>Pesticides/PCBs (mg/kg)</b>						
4,4'-DDD	0.01 J	--	2	12	0.0066	4
4,4'-DDE	0.068 J	--	1.9	12	0.32	3
4,4'-DDT	0.038	--	1.9	12	0.3253	3
Aldrin	0.0024 J	--	0.03	--	0.015	0.04
Alpha-chlordane	0.027	--	1	--	0.004	--
Endosulfan I	0.013	--	0.05	--	--	--
Endosulfan II	0.015 J	--	47	--	--	--
Endrin	0.012	--	0.6	--	0.051	8
Gamma-chlordane	0.022 J	--	1	--	0.004	--
Heptachlor epoxide	0.11	--	0.06	--	0.026	0.09
Aroclor-1260	0.44 J	--	0.32	--	0.106	2

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TABLE 2-2

**PRE- AND POST-REMOVAL SURFACE SOIL SAMPLE RESULTS (DETECTED ANALYTES)  
COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED SCREENING BENCHMARKS  
AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA  
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS  
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Analyte	AOC 53		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels	Soil Clean-up Goals
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration*	EBS Human Health Soil Benchmark**	SERA Eco Soil Benchmark	Surface Soil Background	MCP S-1/GW-1 Standards
<b>Inorganics (mg/kg)</b>						
Aluminum	8600 J	--	7800	--	10499.13	--
Antimony	0.46 J	--	3.1	--	1.91	20
Arsenic	3.8	--	0.43	60	5.31	20
Barium	34.5	--	550	--	49.9	1000
Beryllium	<b>0.49</b>	--	0.7	--	0.3	0.7
Cadmium	0.83 J	--	3.9	20	0.9	2
Chromium	<b>14</b>	--	39	0.4	10.1	30
Cobalt	<b>5.8</b>	--	470	--	3.98	--
Copper	14	--	310	50	26.22	--
Iron	<b>18000 J</b>	--	2300	--	11300	--
Lead	93.7	--	300	500	301.7	300
Manganese	275 J	--	160	--	313.83	--
Mercury	0.33 J	--	20	0.1	0.49	20
Nickel	9.7	--	160	200	17.2	20
Selenium	0.81 J	--	390	70	3	400
Silver	0.06 J	--	39	--	--	100
Vanadium	23.5 J	--	55	--	89.1	600
Zinc	<b>484 J</b>	--	2300	200	73.8	2500

**NOTES:**

**Bold** = Sample result exceeds background level.  
 shaded = Sample result exceeds human health or ecological screening benchmark.  
 -- = Not sampled (surface soil removed) or not available (regarding screening criteria or background data).  
 NA = Not Applicable  
 J = estimated value  
 EBS = Environmental Baseline Survey  
 SERA = Screening Ecological Risk Assessment  
 mg/kg = milligrams per kilogram (parts per million)

Cited background levels are the 95% Upper Prediction Limit (UPL) of the background dataset. Prediction limits provide coverage of 100% of future measurements with a given level of confidence (e.g., 95%). The UPL may be higher or lower than the maximum detected value, and defaults to the maximum in the case of non-parametric data or if more than half the samples are non-detect. 95% UPL values are as reported in the NAS South Weymouth basewide background dataset, as amended in November 2002.

\*Surface soil was removed and replaced with clean fill from an offsite source.

\*\* The human health risk-based benchmarks used for the Phase II EBS are the most conservative (lowest) value under residential exposure scenarios provided in EPA Region III Risk Based Concentrations (RBCs) (EPA 1996) and MCP Method 1 Standards S-1/GW-1 values for soil (Massachusetts Contingency Plan - 310 CMR 40.0000). Non-carcinogenic EPA RBC values were reduced by a factor of 10, as a further conservative measure to account for potential additive effects.

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TABLE 2-3

**PRE- AND POST-REMOVAL SUBSURFACE SOIL SAMPLE RESULTS (DETECTED ANALYTES)**  
**COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED SCREENING BENCHMARKS**  
**AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA**  
**NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS**  
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Analyte	AOC 53		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels	Soil Clean-up Goals
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration*	EBS Human Health Soil Benchmark**	SERA Eco Soil Benchmark	Subsurface Soil Background	MCP S-1/GW-1 Standards
<b>Volatile Organic Compounds (mg/kg)</b>						
Acetone	0.24 J	ND	3	--	0.05975	3
2-Butanone	0.03	0.19	4700	--	0.0095	0.4
Chloromethane	0.001 J	ND	49	--	--	--
Dichloromethane	0.0044 J	ND	0.1	--	--	0.1
Methylbenzene	0.0013 J	ND	90	--	--	--
Naphthalene	ND	0.21	4	--	--	4
1,2,4-Trichlorobenzene	ND	0.052 J	78	--	--	100
Xylenes	0.025	ND	500	--	0.004	400
<b>Semi-Volatile Organic Compounds (mg/kg)</b>						
Acenaphthene	1.6	2.5	20	--	--	20
Acenaphthylene	2.3	ND	100	--	--	100
Anthracene	3.7	0.13 J	1000	--	--	1000
Benz(a)anthracene	17 J	0.18	0.7	--	0.6	0.7
Benzo(a)pyrene	11 J	0.14 J***	0.087	--	0.016	0.7
Benzo(b)fluoranthene	16 J	0.14 J	0.7	--	0.81	0.7
Benzo(g,h,i)perylene	9.3 J	0.086 J	1000	--	0.33	1000
Benzo(k)fluoranthene	14 J	0.11 J	7	--	0.32	70
Benyl butyl phthalate	68 J	ND	1600	200	0.2	--
Bis(2-ethylhexyl)phthalate	0.53	ND	46	200	0.205	100
Carbazole	2.3	ND	32	--	--	--
Chrysene	19 J	0.16	7	--	0.71	7
Dibenz(a,h)anthracene	0.67 J	ND	0.087	--	0.0017	0.7
Dibenzofuran	1.3	1.2	31	--	--	--
Di-n-butyl phthalate	1.7	ND	780	--	--	--
Fluoranthene	36 J	0.38	310	--	1.1	1000
Fluorene	2.2	ND	310	--	--	400
Indeno(1,2,3-cd)pyrene	11 J	0.092 J	0.7	--	0.39	0.7
2-methylnaphthalene	0.32 J	ND	4	--	--	4
4-methylphenol	0.16	ND	39	--	--	--
Naphthalene	0.41	ND	4	--	--	4
Phenanthrene	27 J	0.39***	100	30	0.36	700
Pyrene	32 J	0.34	230	--	1	1000
<b>Petroleum Hydrocarbons (mg/kg)</b>						
C11-C22 aromatics	460 J	--	200	--	--	200
C19-C36 aliphatics	330 J	--	2500	--	--	2500
C9-C18 aliphatics	88 J	--	1000	--	--	1000
<b>Pesticides/PCBs (mg/kg)</b>						
4,4'-DDD	0.022 J	--	2	12	0.0042	4
4,4'-DDE	0.0061 J	--	1.9	12	0.0019	3
4,4'-DDT	0.03 J	--	1.9	12	0.0046	3
Aldrin	0.0049 J	--	0.03	--	--	0.04
Alpha-chlordane	0.026	--	1	--	--	--
Beta-BHC	0.0099	--	0.35	--	--	--

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TABLE 2-3

**PRE- AND POST-REMOVAL SUBSURFACE SOIL SAMPLE RESULTS (DETECTED ANALYTES)  
COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED SCREENING BENCHMARKS  
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NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS  
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Analyte	AOC 53		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels	Soil Clean-up Goals
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration*	EBS Human Health Soil Benchmark**	SERA Eco Soil Benchmark	Subsurface Soil Background	MCP S-1/GW-1 Standards
<b>Pesticides/PCBs (mg/kg) (cont.)</b>						
Endosulfan I	0.043	--	0.05	--	--	--
Endosulfan II	0.02 J	--	47	--	--	--
Endrin	0.072 J	--	0.6	--	--	8
Gamma-chlordane	0.027	--	1	--	--	--
Heptachlor	0.0032	--	0.1	--	--	0.2
Heptachlor epoxide	0.069 J	--	0.06	--	--	0.09
<b>Inorganics (mg/kg)</b>						
Aluminum	<b>9920 J</b>	--	7800	--	8518.54	--
Antimony	0.57 J	--	3.1	--	3.65	20
Arsenic	<b>3.2</b>	--	0.43	60	1.89	30
Barium	<b>77</b>	--	550	--	27.03	1000
Beryllium	<b>1.9 J</b>	--	0.7	--	0.44	0.7
Chromium	<b>14</b>	--	39	0.4	10.15	30
Cobalt	<b>7.1</b>	--	470	--	4.74	--
Copper	<b>44</b>	--	310	50	14.2	--
Iron	<b>19100</b>	--	2300	--	11448.94	--
Lead	<b>39</b>	--	300	500	9.27	300
Manganese	364 J	--	160	--	413.84	--
Mercury	<b>0.32 J</b>	--	20	0.1	0.11	20
Nickel	<b>13.2</b>	--	160	200	6.5	20
Selenium	<b>3.5 J</b>	--	390	70	0.41	400
Vanadium	<b>22.4 J</b>	--	55	--	17.08	600
Zinc	<b>151</b>	--	2300	200	28.74	2500

**NOTES:**

**Bold** = Sample result exceeds background level.  
 shaded = Sample result exceeds human health or ecological screening benchmark.  
 -- = Not sampled (data) or not available (regarding screening criteria or background data).  
 NA = Not Applicable

J = estimated value  
 EBS = Environmental Baseline Survey  
 SERA = Screening Ecological Risk Assessment  
 mg/kg = milligrams per kilogram (parts per million)  
 ND = non-detect

Cited background levels are the 95% Upper Prediction Limit (UPL) of the background dataset. Prediction limits provide coverage of 100% of future measurements with a given level of confidence (e.g., 95%). The UPL may be higher or lower than the maximum detected value, and defaults to the maximum in the case of non-parametric data or if more than half the samples are non-detect. 95% UPL values are as reported in the NAS South Weymouth basewide background dataset, as amended in November 2002.

\*Closeout Report Action Memorandum, Area of Concern 53 (Tetra Tech EC, 2005).

\*\* The human health risk-based benchmarks used for the Phase II EBS are the most conservative (lowest) value under residential exposure scenarios provided in EPA Region III Risk Based Concentrations (RBCs) (EPA 1996) and MCP Method 1 Standards S-1/GW-1 values for soil (Massachusetts Contingency Plan - 310 CMR 40.0000). Non-carcinogenic EPA RBC values were reduced by a factor of 10, as a further conservative measure to account for potential additive effects.

\*\*\* These results exceeded the NAS South Weymouth background levels but did not exceed the MassDEP Natural Fill background levels.

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TABLE 2-4

**PRE- AND POST-REMOVAL SEDIMENT SAMPLE RESULTS (DETECTED ANALYTES)**  
**COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED SCREENING BENCHMARKS**  
**AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA**  
**NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS**  
**PAGE 1 OF 2**

Analyte	AOC 53		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels	Sediment Clean-up Goals
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration*	EBS Human Health Sed. Benchmark**	SERA Eco Sediment Benchmark	Sediment Background	MCP S-1/GW-1 Standards (based on soil)
<b>Volatile Organic Compounds (mg/kg)</b>						
Acetone	0.22	0.045	3	0.0087	0.41684	3
2-Butanone	0.15	0.0064	4700	0.27	0.33	0.3
Carbon disulfide	ND	0.016	780	--	--	100
Methyl n-butyl ketone	0.0026 J	--	310	0.022	0.008	--
Methylbenzene	0.0025	--	90	0.67	0.02495	--
Tetrachloroethene	0.013 J	ND	0.5	--	0.026	0.5
Toluene	ND	0.0013	--	--	0.02495	90
<b>Semi-Volatile Organic Compounds (mg/kg)</b>						
Anthracene	0.41 J	0.1 J	1000	0.22	0.4356	1000
Benz(a)anthracene	5.6	0.41	0.7	0.32	1.4	0.7
Benzo(a)pyrene	5.7	0.43	0.087	0.37	3.44652	0.7
Benzo(b)fluoranthene	11	0.5	0.7	0.24	2	0.7
Benzo(g,h,i)perylene	1.8	0.15	1000	0.17	0.37477	1000
Benzo(k)fluoranthene	7.7	0.47	7	0.24	1.1	7
Bis(2-ethylhexyl)phthalate	0.73 J	0.15	46	11	0.64	100
Carbazole	0.54 J	0.072 J	32	--	--	--
Chrysene	9.8	0.52	7	0.34	1.7	7
di-n-butyl phthalate	0.18 J	0.13 B	780	11	2.9	--
Dibenz(a,h)anthracene	0.059 J	ND	0.087	0.06	0.19	0.7
Fluoranthene	13	1	310	6.2	3	1000
Indeno(1,2,3-cd)pyrene	1.9	0.17	0.7	0.2	0.49	0.7
Phenanthrene	3	0.4	100	1.8	1.4	1000
Pyrene	13	8	230	0.49	2.3	1000
<b>Petroleum Hydrocarbons (mg/kg)</b>						
C19-C36 aliphatics	280 J	--	2500	--	--	2500
<b>Pesticides/PCBs (mg/kg)</b>						
4,4'-DDD	0.083	0.16	2	0.008	0.73	2
4,4'-DDE	0.14 J	0.026	1.9	0.005	0.23428	2
4,4'-DDT	0.29 J	0.0054	1.9	0.008	0.29	2
Alpha-chlordane	0.0088	ND	1	0.007	0.012	1
Dieldrin	0.001 J	ND	0.03	0.11	0.017	0.03
Endosulfan I	0.0075 J	ND	0.05	--	0.086	0.05
Endosulfan II	0.003 J	ND	47	0.014	0.0029	0.05
Endosulfan Sulfate	0.0014 J	ND	--	0.0054	0.0023	--
Endrin ketone	0.012 J	ND	--	0.042	0.0066	--
Gamma-chlordane	0.0059 J	0.012 P	1	0.007	0.014	1
Heptachlor Epoxide	0.022 J	ND	0.06	--	0.017	0.06



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TABLE 2-4

**PRE- AND POST-REMOVAL SEDIMENT SAMPLE RESULTS (DETECTED ANALYTES)  
COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED SCREENING BENCHMARKS  
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Analyte	AOC 53		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels	Sediment Clean-up Goals
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration*	EBS Human Health Sed. Benchmark**	SERA Eco Sediment Benchmark	Sediment Background	MCP S-1/GW-1 Standards (based on soil)
<b>Inorganics (mg/kg)</b>						
Aluminum	<b>11000 E, N</b>	4700	7800	--	8767.37	--
Antimony	<b>1.7 N</b>	0.2 JN	3.1	2	1.355	10
Arsenic	<b>9</b>	<b>1.5 E</b>	0.43	6	8.9	30
Barium	100	24	550	500	202.48	1000
Beryllium	<b>0.55</b>	0.36 J	0.7	--	0.46	0.7
Cadmium	<b>6.3</b>	0.3	3.9	0.6	1.95	30
Calcium	6900	1400	--	--	13900	--
Chromium	<b>31</b>	8.3	39	26	11.92	1000
Cobalt	8.3	4.9 J	470	--	25.7	500
Copper	<b>120</b>	10	310	16	53.3	1000
Cyanide	1.6	--	100	--	--	100
Iron	22700	<b>7700</b>	2300	20000	24000	--
Lead	<b>267</b>	30	300	31	200.86	300
Magnesium	<b>2400</b>	1600	--	--	1683.03	--
Manganese	1020 J	160	160	460	3690	--
Mercury	<b>0.63 J</b>	0.085	20	0.2	0.28	20
Nickel	<b>23</b>	6.8	160	16	11.71	300
Potassium	<b>820</b>	500	--	--	603.24	--
Selenium	<b>3.1</b>	<b>0.98</b>	390	1	0.6675	400
Silver	<b>0.41</b>	0.1 J	39	--	0.2	100
Sodium	740	300	--	--	2180	--
Thallium	<b>1.3 J</b>	<b>0.075</b>	0.55	--	ND	8
Vanadium	<b>50.5</b>	12	55	200	38.18	400
Zinc	<b>1200</b>	45 E	2300	120	549	2500

**NOTES:**

**Bold** = Sample result exceeds background level.  
**shaded** = Sample result exceeds human health or ecological screening benchmark.  
**--** = Not sampled (data) or not available (screening criteria or background data).  
**NA** = Not Applicable  
**J (or E)** = estimated value  
**N** = spike recovery outside control limits

**P** = This flag is used for GC analyses when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".  
**EBS** = Environmental Baseline Survey  
**SERA** = Screening Ecological Risk Assessment  
**mg/kg** = milligrams per kilogram (parts per million)

Cited background levels are the 95% Upper Prediction Limit (UPL) of the background dataset. Prediction limits provide coverage of 100% of future measurements with a given level of confidence (e.g., 95%). The UPL may be higher or lower than the maximum detected value, and defaults to the maximum in the case of non-parametric data or if more than half the samples are non-detect. 95% UPL values are as reported in the NAS South Weymouth basewide background dataset, as amended in November 2002.

\*Closeout Report Action Memorandum, Area of Concern 53 (Tetra Tech EC, 2005).

\*\* The human health risk-based benchmarks used for the Phase II EBS are the most conservative (lowest) value under residential exposure scenarios provided in EPA Region III Risk Based Concentrations (RBCs) (EPA 1996) and MCP Method 1 Standards S-1/GW-1 values for soil (Massachusetts Contingency Plan - 310 CMR 40.0000). Non-carcinogenic EPA RBC values were reduced by a factor of 10, as a further conservative measure to account for potential additive effects.

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TABLE 2-5

**GROUNDWATER SAMPLE RESULTS (DETECTED ANALYTES)  
COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED BENCHMARKS  
AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA  
NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS**

Analyte	Maximum Detected Concentration	EBS Human Health Benchmark	Background Level*	Federal Primary MCL	MCP GW-1
<b>Volatile Organic Compounds (ug/L)</b>					
Dichloromethane	1 J	4.1	--	5	5
<b>Semi-Volatile Organic Compounds (ug/L)</b>					
Benzo(a)pyrene	0.0067 J	0.0092	--	0.2	0.2
Dibenz(a,h)anthracene	0.03 J	0.0092	0.03	--	0.5
<b>Inorganics (ug/L)</b>					
Aluminum	9300	3700	15341.35	--	--
Barium	50	260	181.32	2	2000
Chromium	10	18	18.1	0.1	100
Copper	10	150	13.5	--	--
Iron	16000	1100	44137.52	--	--
Lead	9 J	15	--	15**	15
Manganese	1100	73	2680.63	--	--
Nickel	9	73	--	--	100
Vanadium	10	26	22.6	--	30
Zinc	430	900	51.7	--	5000

**NOTES:**

**Bold** = Exceeds background.  
 Shaded = Sample result exceeds human health or ecological screening benchmark.  
 -- = Not available.  
 J = estimated value  
 EBS = Environmental Baseline Survey  
 MCL = Maximum Contaminant Level  
 MCP = Massachusetts Contingency Plan  
 ug/L = micrograms per liter (parts per billion)

\* Cited background levels are the 95% Upper Prediction Limit (UPL) of the background dataset. Prediction limits provide coverage of 100% of future measurements with a given level of confidence (e.g., 95%). The UPL may be higher or lower than the maximum detected value, and defaults to the maximum in the case of non-parametric data or if more than half the samples are non-detect. 95% UPL values are as reported in the NAS South Weymouth basewide background dataset, as amended in November 2002.

\*\* Action Level

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TABLE 2-6

**SURFACE WATER SAMPLE RESULTS (DETECTED ANALYTES)**  
**COMPARED TO NAS SOUTH WEYMOUTH BACKGROUND LEVELS AND RISK-BASED BENCHMARKS**  
**AREA OF CONCERN 53 – FORMER RADIO TRANSMITTER BUILDING AREA**  
**NAS SOUTH WEYMOUTH, WEYMOUTH, MASSACHUSETTS**

Analyte	Maximum Detected Concentration	EBS Human Health Benchmark	EBS Ecological Benchmark	Background Level*
<b>Volatile Organic Compounds (ug/L)</b>				
Acetone	5.4	--	1500	--
<b>Semi-Volatile Organic Compounds (ug/L)</b>				
Bis(2-ethylhexyl)phthalate	<b>75</b>	--	3	0.7
<b>Pesticides/PCBs (ug/L)</b>				
4,4'-DDT	0.0056 J	--	0.011	--
<b>Inorganics (ug/L)</b>				
Aluminum	<b>1930</b>	--	87	727
Arsenic	4.3 J	--	190	--
Barium	<b>308</b>	--	4 (110)**	62.16
Beryllium	0.41	--	5.3	--
Cadmium	0.88 J	--	0.7	--
Calcium	15100	--	116000	17000
Chromium	<b>4.4 J</b>	--	11	2.8
Cobalt	4.2 J	--	23	7.2
Copper	<b>12.2</b>	--	5 (7)**	3.9
Cyanide	5 J	--	5.2	--
Iron	11400	--	1000	34800
Lead	<b>44.9</b>	--	1.3 (30)**	5.86
Magnesium	4610	--	82000	5120
Manganese	895	--	120	1408.29
Nickel	13	--	88	--
Potassium	2050	--	53000	6802.65
Sodium	49600	--	680000	163000
Vanadium	4.2 J	--	20	--
Zinc	<b>322 J</b>	--	60	54.6

**NOTES:**

**Bold** = Sample result exceeds background level.  
shaded = Sample result exceeds human health or ecological screening benchmark.  
-- = Not available.  
J = estimated value  
EBS = Environmental Baseline Survey  
ug/L = micrograms per liter (parts per billion)

\* Cited background levels are the 95% Upper Prediction Limit (UPL) of the background dataset. Prediction limits provide coverage of 100% of future measurements with a given level of confidence (e.g., 95%). The UPL may be higher or lower than the maximum detected value, and defaults to the maximum in the case of non-parametric data or if more than half the samples are non-detect. 95% UPL values are as reported in the NAS South Weymouth basewide background dataset, as amended in November 2002.

\*\* Shown as chronic (acute) screening concentrations.

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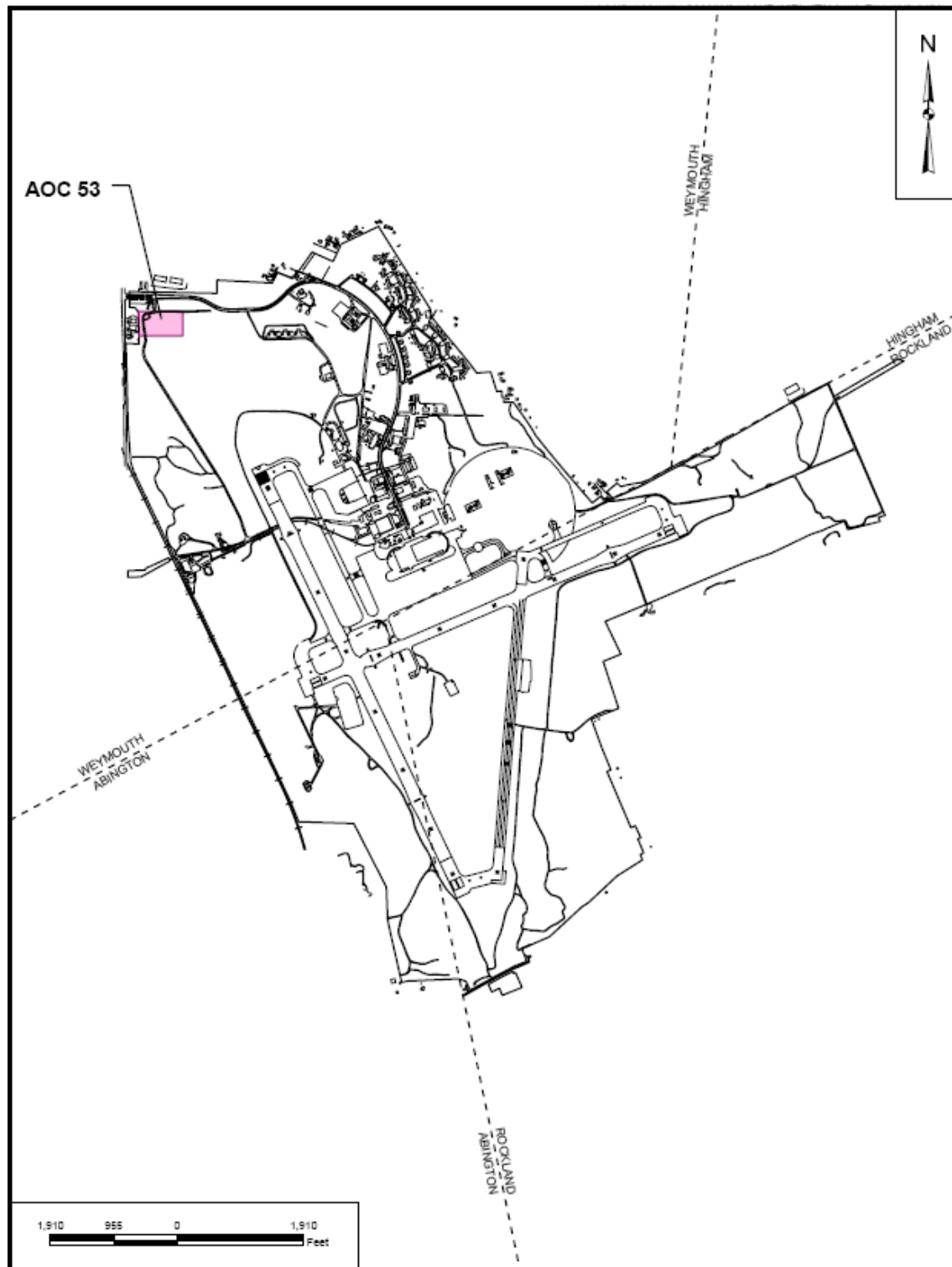
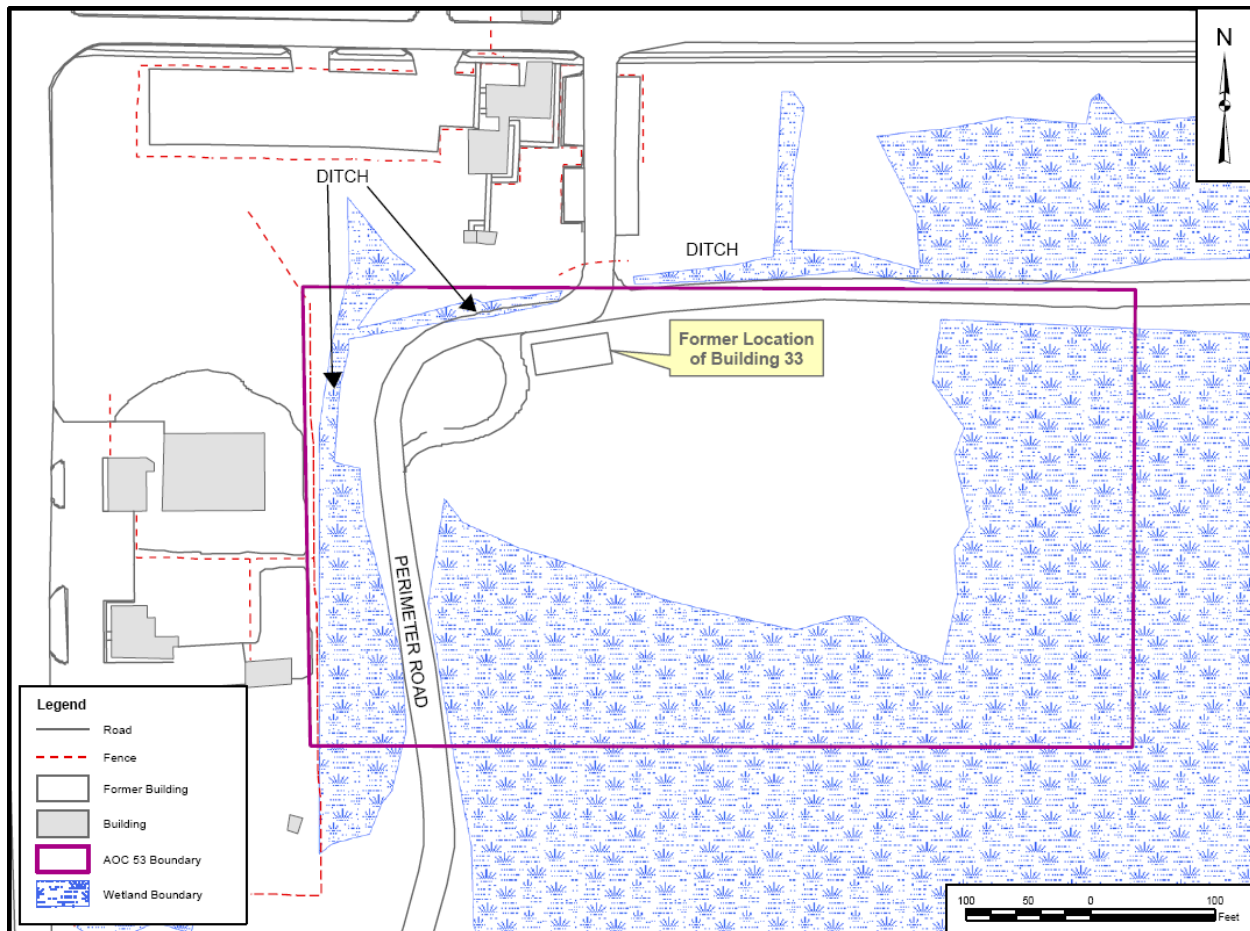


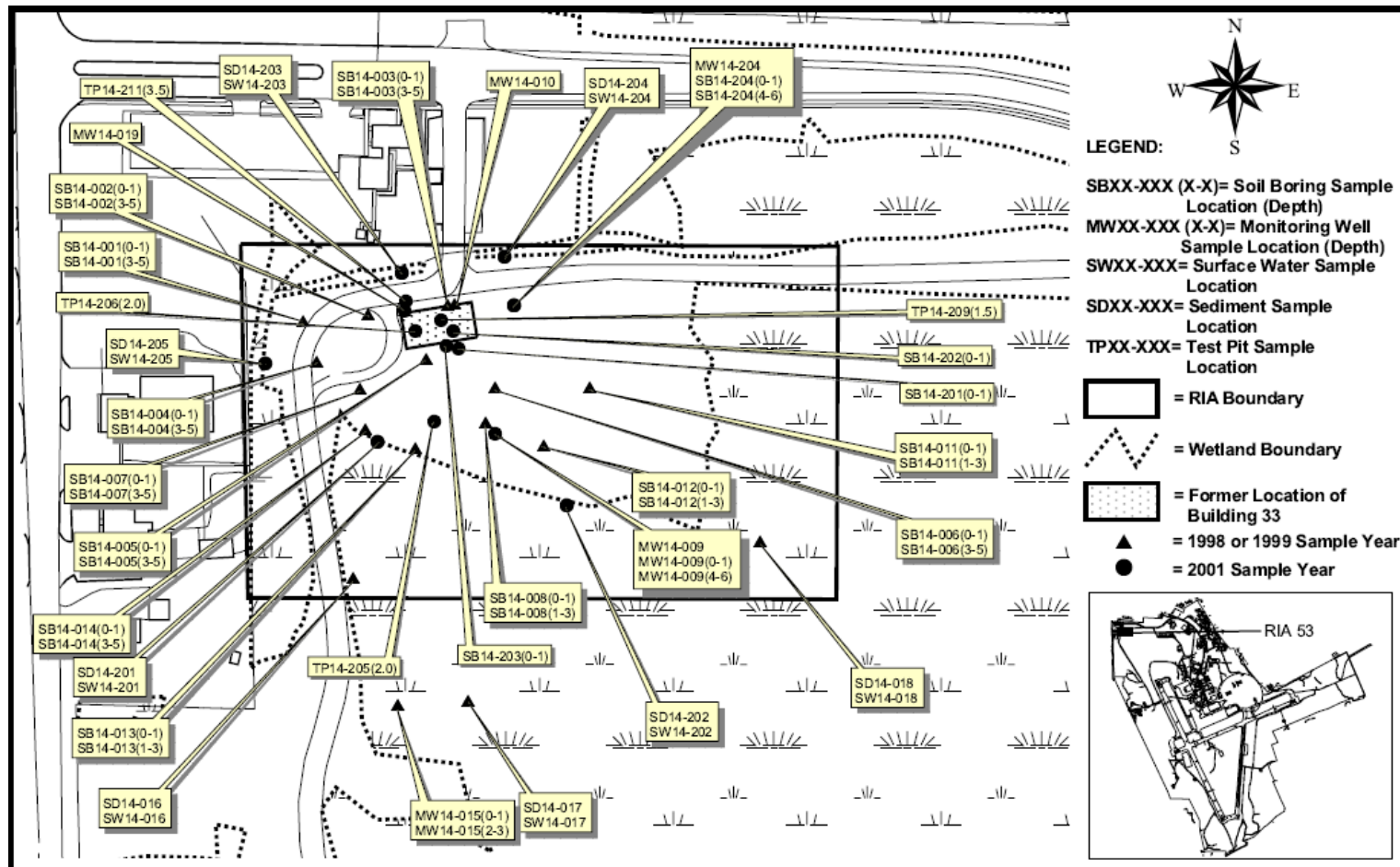
Figure 2-1: Site Location Map

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**Figure 2-2: Site Detail Map**

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**Figure 2-3: Sample Location Map (Pre-Removal)**  
(source: Stone & Webster, 2004a)



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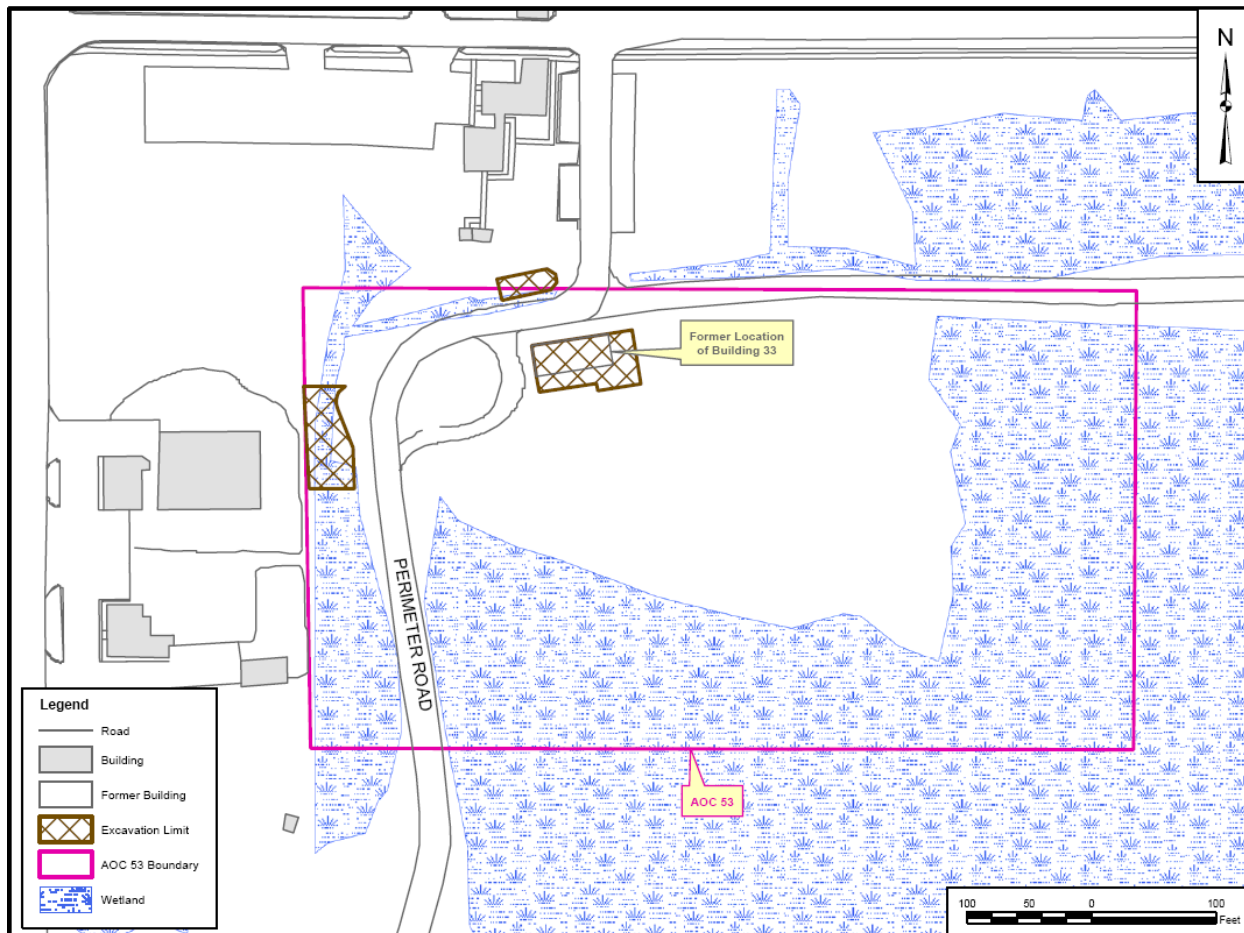
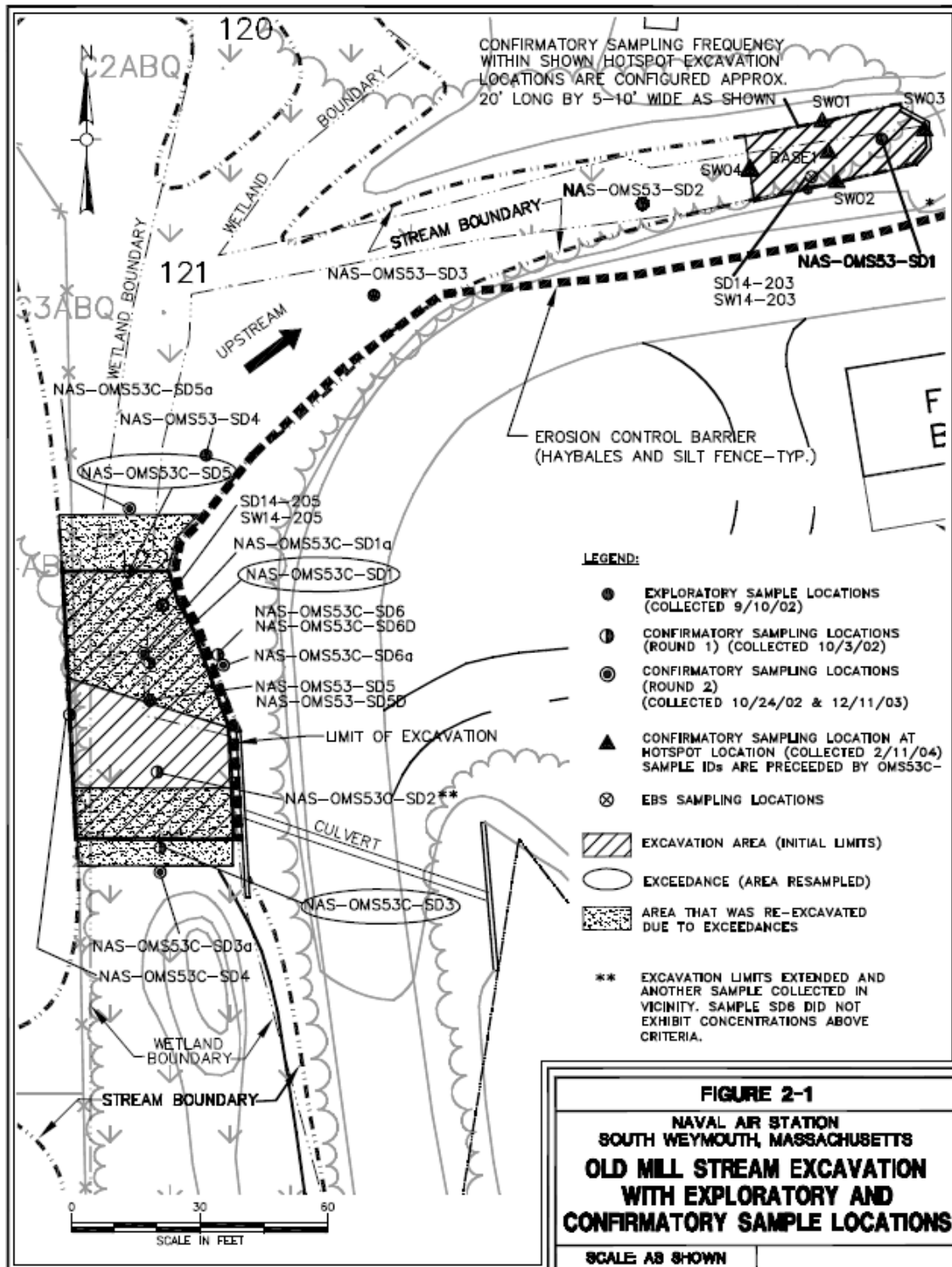


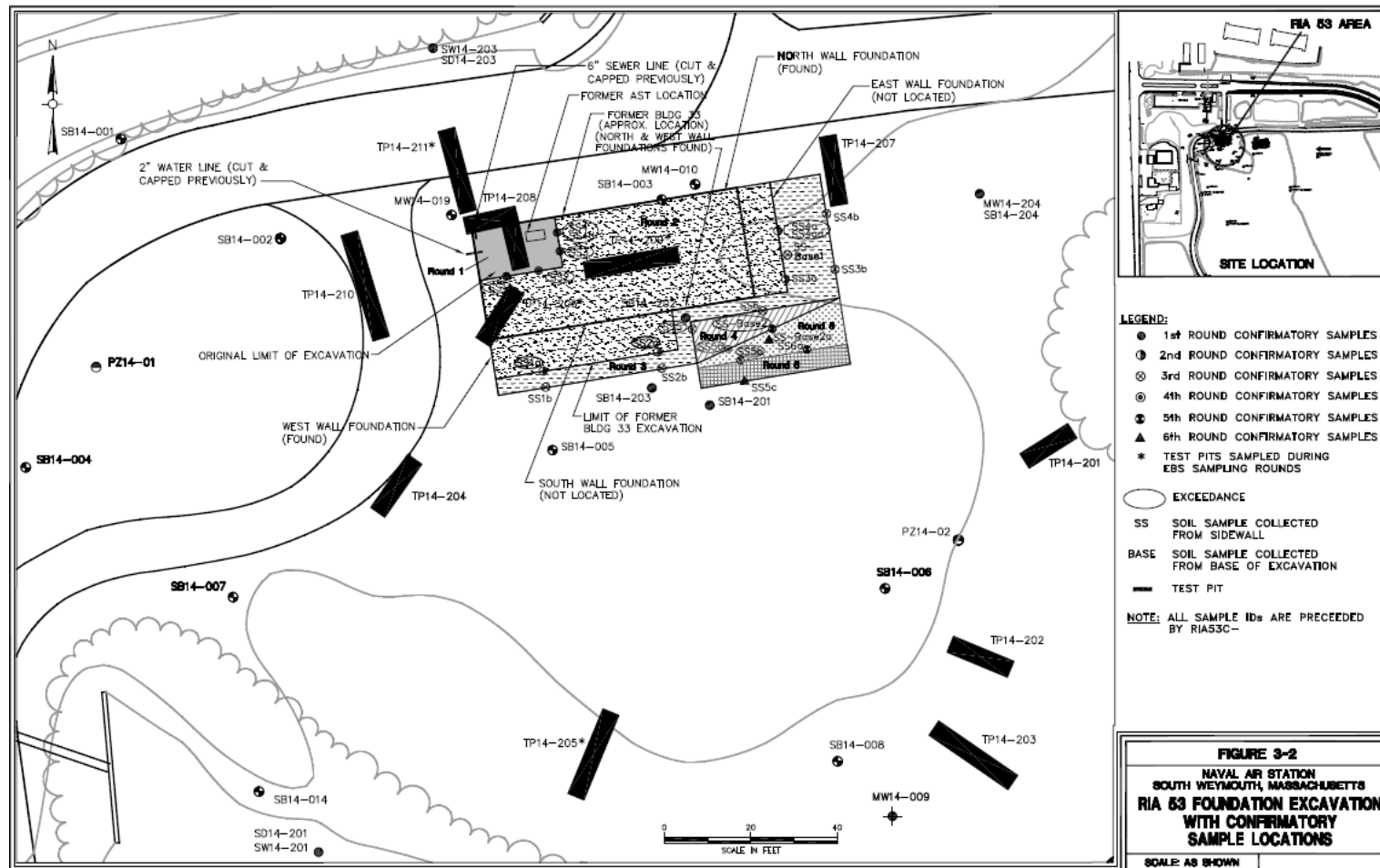
Figure 2-4: Removal Action Areas Overview

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**Figure 2-5: Streambed Removal Action Areas**  
 (source: Stone & Webster, 2004b)





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**PART 3—RESPONSIVENESS SUMMARY**

**I. STAKEHOLDER ISSUES AND NAVY RESPONSES**

The Navy held a joint Public Hearing for two (2) Proposed Plans involving four (4) Areas of Concern (AOCs) on July 19, 2007. Verbal comments were received from several people during the public hearing on the Proposed Plan for AOC 4A (Air Traffic Control Area Abandoned Septic System) and AOC 55D (Wetland Area North of Trotter Road) and the Proposed Plan for AOC 8 (Wyoming Street Area – Building 70) and AOC 53 (Former Radio Transmitter Building Area). A copy of the transcript for the public hearing is provided as Appendix E. Responses to the verbal comments are provided in Section III of this Responsiveness Summary. No written comments concerning AOC 53 were received during the public comment period.

**II. TECHNICAL AND LEGAL ISSUES**

The Navy has reviewed all comments received and the Navy does not believe any of the public hearing comments necessitate a change from the No Further Action Proposal for AOC 53.

Therefore, the Navy and EPA believe that there is sufficient technical basis to proceed with the No Further Action ROD for AOC 53. By proceeding with this ROD, the Navy has completed all required CERCLA actions/investigations at the site.

**III. COMMENT RESPONSES**

Verbal Comments and Response

Note that the following verbal comments are paraphrased. Refer to the hearing transcript (Appendix E.1) for the complete version of the comments recorded during the public hearing held on July 19, 2007.

**1. Comment from Harvey Welch, Weymouth**—Mr. Welch asked why testing the effects of combinations of chemicals on mice is only now underway. He wondered how decisions about health impacts on children and adults can be made without knowing the effects of combinations of chemicals.

**Response**—The Navy's human health risk assessments follow a process developed in conjunction with EPA and MassDEP for AOCs at NAS South Weymouth. This process is based on the EPA CERCLA human health risk assessment approach, which currently sums the risks calculated for individual chemicals of concern at a site to get a total risk number. This risk assessment approach is conservative because it adds the risks from all contaminants, rather than adding risks from a subset of contaminants that target the same organ. To date, the science supporting risk assessments has been based on studies of individual chemicals, but not on synergistic effects from combinations of chemicals. EPA has noted that studies on mice using combinations of chemicals are now being conducted. The risk assessment process may be modified in the future should there be a scientifically-supported basis demonstrating significantly different synergistic risks resulting from combinations of chemicals, but it is likely that this is several years out. It is important to note that while many chemicals appear frequently at sites, the actual chemicals of concern can vary based on the known or assumed source(s) of contamination.

**2. Comment from James Cunningham, Weymouth**—Mr. Cunningham expressed a concern about all four sites regarding wetlands in general and the possible effect on the flora and fauna in the area. He also noted a concern about possible filling and use of wetland areas by the developer. At AOC 4A, he felt

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the presence of the septic tank could be a hazard and have an impact on the wetlands. He suggested that the tank, and the distribution box, should be removed.

**Response**—The risk assessment process and outcomes summarized in the Proposed Plans for AOCs 4A, 55D, 8, and 53 are designed conservatively to ensure that there is no unacceptable risk to people and wildlife (e.g. flora and fauna). The AOC 4A and 55D streamlined human health and ecological risk assessments were conducted by Navy with input from EPA and MassDEP throughout the process. Both agencies concurred with the results of the risk assessments for AOCs 4A and 55D and Navy's conclusions that No Action is appropriate at AOC 4A and 55D, and No Further Action is appropriate for AOCs 8 and 53. Regarding use of wetland areas by the developer, Navy does not have a role in the redevelopment process. However, the developer's redevelopment activities must comply with all applicable federal, state, and local laws and regulations.

At the time the septic system was inspected in 1999, South Shore Tri-Town Development Corporation (SSTTDC) had indicated a reuse potential for the control tower which the septic system supported. As such, Navy left the septic system in place to allow for its possible rehabilitation by SSTTDC to allow the tower to be reused. The SSTTDC plans have subsequently changed. As noted in the response to Mr. McCormack's written comment, Navy plans to abandon the septic system in place, in accordance with applicable state regulations.

**3. Comment from Harvey Welch, Weymouth**—Mr. Welch suggested including the roads surrounding the base on maps of the base to help the public orient themselves.

**Response**—As appropriate, Navy will include roads surrounding the base on maps presented in future Proposed Plans.

**4. Comment from Peter Scannell, Weymouth**—Mr. Scannell stated that he is uncomfortable hearing about acceptable levels of chemicals and the conclusions leading to no further action. He also acknowledged that the best science available has been used in the risk assessments. However, his concern is the presence of chemicals in these areas, even though they are at levels deemed acceptable by the risk assessments.

**Response**—Please see the Responses to Comments # 1 and #2 above.

**5. Comment from Ann Hilbert, North Weymouth**—Ms. Hilbert expressed a concern about the health study and asked why Navy doesn't do their own health assessment.

**Response**—EPA has listed NAS South Weymouth on the National Priorities List (NPL). Accordingly, the Navy is following the CERCLA process at NAS South Weymouth to evaluate potential risks associated with exposures to concentrations of chemicals present at a site. The CERCLA process does not include an evaluation of public health issues related to historical exposures to chemicals in the environment. Public health and epidemiological studies of historical exposures are the responsibility of the Massachusetts Department of Public Health (MDPH) and the Agency for Toxic Substances and Disease Registry (ATSDR). The MDPH has recently conducted an amyotrophic lateral sclerosis (ALS) and multiple sclerosis (MS) study, and in 1999 ATSDR completed a public health assessment of NAS South Weymouth. While the Navy had no direct involvement with either the MDPH or ATSDR studies, the ATSDR study used Navy environmental data available at the time. The ATSDR study can be found at: [http://www.atsdr.cdc.gov/HAC/PHA/weymouth/wey\\_toc.html](http://www.atsdr.cdc.gov/HAC/PHA/weymouth/wey_toc.html).

**6. Comment from Joanne Rakers**—Ms. Rakers asked how to know if a chemical is toxic or not and at what level a chemical, such as arsenic, is higher than the normal level it should be. She also asked about details of the benchmark screening process and why if a chemical exceeds a level it isn't

**Record of Decision**  
**Naval Air Station South Weymouth**  
**Part 3—Responsiveness Summary**

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cleaned up. Ms. Rakers also indicated a desire to know what is leaking from the Rubble Disposal Area (RDA) into Swamp River. She wants to see things cleaned up.

**Response**—The Proposed Plans presented at the July 19<sup>th</sup> public meeting summarized field work performed over many years as well as a large amount of chemical data that are discussed in detail in a number of reports. The documents applicable to each of the four AOCs are listed in a table at the end of each Proposed Plan and are available at the information repositories listed on the final page of each Proposed Plan. Details regarding the benchmark screening process conducted for AOCs 4A and 55D are in the streamlined human health risk assessments (HHRA) and streamlined ecological risk assessments (ERA) for each AOC. Site data were compared to screening benchmarks (guideline concentrations) to determine whether potential health effects were possible and if further assessment and/or remediation were required. The benchmarks are a preliminary screen and are not intended to be regulatory standards. Specific risk-based cleanup levels (concentrations) were developed for sites where it was determined that cleanup was warranted (e.g., AOCs 8 and 53). The specific benchmarks and cleanup levels are available for public review in the risk assessment (and other) documents. The Navy encourages the public to review the investigation reports to gain a better understanding of the environmental activities completed at each site. Consistent with the CERCLA process followed for the AOCs, and with input and review from EPA and MassDEP, chemicals detected in environmental media do not need to be ‘cleaned up’ if they are determined to be at concentrations that result in no unacceptable risk to human health and the environment or that are within background levels (e.g., many metals such as arsenic can be naturally occurring to some degree based on the site geology).

Navy has closed the RDA consistent with the Record of Decision signed by Navy and EPA in December 2003. The selected remedy included a cover system (landfill cap), which has been completed, and long-term monitoring, which is underway. The long-term monitoring reports are provided to the regulators, RAB town representatives, and the local repositories. Navy encourages the public to review these reports, which include the analytical results of all samples collected, to gain a better understanding of the long-term monitoring process and results.

**7. Comment from Michael Smart, Weymouth**—Mr. Smart commented that he felt that Navy did a thorough job on the work completed at AOCs 8 and 53. He agreed with Mr. Cunningham that the septic tank at AOC 4A should be removed. In addition, Mr. Smart stated his opinion that all material should be removed regardless of the level, especially the sediments in the wetland areas at AOCs 4A and 55D.

**Response**—Navy appreciates the acknowledgement of the work completed for AOCs 8 and 53. As noted in the response to Mr. McCormack’s written comment, Navy plans to abandon the septic system in place, in accordance with applicable state regulations. As noted in the Response to Comment #6, consistent with the CERCLA process, chemicals detected in environmental media do not need to be ‘cleaned up’ if they are determined to be at concentrations that result in no unacceptable risk to human health and the environment.

**8. Comment from Dominic Galluzzo, Weymouth**—Mr. Galluzzo noted that with the presentations on the Proposed Plans, the approximately two-thirds of the base that is ready to transfer have few contaminants of concern and little risk to humans. However, he expressed his skepticism as to the cleanliness of the land that will be redeveloped according to the reuse plan.

**Response**—As Mr. Galluzzo accurately noted, there have been few contaminants of concern found in all the investigations Navy has completed to date in accordance with the CERCLA process. The risk assessments that have been completed have also generally concluded low risks to human health and the environment. As mentioned in the responses above, in particular the Response to Comment #6, the CERCLA process followed by Navy with input and review by EPA and MassDEP, can result in conclusions of no unacceptable risk even though detected chemicals are present. The rigorous risk

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Naval Air Station South Weymouth  
Part 3—Responsiveness Summary**

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assessment process developed by EPA, and followed by Navy, does not require cleanup of a site when there is no unacceptable risk or when concentrations are below background levels.

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**APPENDIX A: MASSACHUSETTS DEPARTMENT OF  
ENVIRONMENTAL PROTECTION LETTER OF CONCURRENCE**

Refer to attached copy.



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

DEVAL L. PATRICK  
Governor

TIMOTHY P. MURRAY  
Lieutenant Governor

IAN A. BOWLES  
Secretary

LAURIE BURT  
Commissioner

Mr. James T. Owens, Director  
Office of Site Remediation and Restoration  
U.S. Environmental Protection Agency  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

Re: Record of Decision  
Area of Concern 53  
Former South Weymouth NAS  
MassDEP RTN 4-3002621  
January 15, 2008

Dear Mr. Owens:

The Massachusetts Department of Environmental Protection (MassDEP) has reviewed the *Record of Decision, Area of Concern 53 – Former Radio Transmitter Building Area, Naval Air Station South Weymouth*, dated December 2007. The Record of Decision (ROD) summarizes the results from the investigations conducted during the Environmental Baseline Survey (EBS) and the results from the removal actions that were conducted to address unacceptable risks to human health of the environment, and documents the Navy's rationale for selecting a No Further Action decision for the site. MassDEP concurs with the selected decision.

If you have any questions or comments, please contact David Chaffin, Project Manager (617-348-4005), or Anne Malewicz, Federal Facilities Section Chief (617-292-5659).

Sincerely,

A handwritten signature in black ink, appearing to read "Janine C.", enclosed within a large, loopy oval.

Janine Commerford  
Assistant Commissioner

CC: D. Barney, USN-S. Weymouth  
K. Keckler, USEPA  
Executive Director, SSTTDC  
RAB Members  
J. Felix, MADEP-Boston  
J. Naparstek, MADEP-Boston

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057. TDD Service - 1-800-298-2207.

MassDEP on the World Wide Web: <http://www.mass.gov/dep>



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**Record of Decision  
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**APPENDIX B: REFERENCES**

EPA, 2000a. Preliminary Remediation Goals (PRGs). EPA Region IX, San Francisco, California. November.

EPA, 2000b. Draft Ecological Soil Screening Level Guidance. July 10, 2000.

Foster Wheeler Environmental Corporation. 2002a. *Draft Work Plan for RIA 53 (Excavation Within Foundation) Limited Removal Action, Former Naval Air Station (NAS) South Weymouth, South Weymouth, Massachusetts*. August 29, 2002.

Foster Wheeler Environmental Corporation. 2002b. *Work Plan Addendum AOC 53, Old Mill Stream Hot Spot Excavation, Former Naval Air Station (NAS) South Weymouth, South Weymouth, Massachusetts*. September, 2002.

Jones, D.S.; G.W. Suter II; and R.N. Hull. 1997. Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision. ES/ER/TM-95/R4, Oak Ridge National Laboratory. November, 1997.

Massachusetts Department of Environmental Protection (MassDEP), 2002. Background Levels of Polycyclic Aromatic Hydrocarbons and Metals in Soil. May 2002.

South Shore Tri-Town Development Corporation (SSTTDC), 2005a. Zoning and Land Use By-Laws for the Naval Air Station South Weymouth. May 5, 2005.

SSTTDC, 2005b. Reuse Plan for Naval Air Station South Weymouth. May 5, 2005.

Stone & Webster Environmental Technology & Services (Stone & Webster), 1996. *Final Report, Phase I Environmental Baseline Survey, Naval Air Station, South Weymouth, Massachusetts*. 18 November.

Stone & Webster, 1998. Final Phase II Environmental Baseline Survey Sampling Work Plan (Rev. 1). October 13, 1998.

Stone & Webster, 2000a. *Final Summary Report of Background Data Summary Statistics for NAS South Weymouth*. February 2000.

Stone & Webster, 2000b. *Final Report, Focused Groundwater Flow Direction Study for the Phase II Environmental Baseline Survey, Naval Air Station, South Weymouth, MA*. July 2000.

Stone & Webster, 2002a. Supplement to Final Summary Report of Background Data Summary Statistics For NAS South Weymouth. November 2002.

Stone & Webster, 2002b. *Draft (Revision 1) Phase II Environmental Baseline Survey Decision Document for Review Item Area 53, Former Radio Transmitter Building, Naval Air Station South Weymouth, MA*. December 23, 2002.

Stone & Webster, 2004a. *Phase II Environmental Baseline Survey Field Report, Area of Concern 53 - Former Radio Transmitter Building. Former Naval Air Station (NAS) South Weymouth, Massachusetts*, December 2004.



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Stone & Webster, 2004b. *Environmental Baseline Survey Phase II Project Memorandum Re: AOC 53 - Former Radio Transmitter Building. Former Naval Air Station (NAS) South Weymouth, Massachusetts*, December 8, 2004.

Tetra Tech EC, Inc., 2005. *Final Closeout Report Action Memorandum for Area of Concern 53, Former Radio Transmitter Building*. June 3, 2005.

Tetra Tech NUS, 2007. *Site Management Plan, Revision 7.0, Naval Air Station South Weymouth, Massachusetts (Draft)*. September 2007.

U.S. EPA, 1999. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and other Remedy Selection Decision Documents. Office of Solid Waste and Emergency Response. EPA/540/R-98/031. OSWER 9200.1-23P. July 1999.

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**APPENDIX C: GLOSSARY**

**Action Memorandum**—A document authorizing and outlining the cleanup plan that will be followed as part of a short-term cleanup under CERCLA.

**Area of Concern (AOC)**—An area initially identified during the Environmental Baseline Survey as a Review Item Area (RIA) and currently being investigated under CERCLA. These sites require either removal actions or risk assessments to identify the potential current and future effects on human health and the environment.

**Background Level**—Chemicals or concentrations of chemicals present in the environment due to naturally occurring geochemical processes and sources, or to human activities not related to specific point sources or site releases.

**Benchmark**—Concentration of a chemical considered to be protective of human health or the environment.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**—A federal law passed in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act. The Act created a special tax that goes into a Trust Fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Navy compliance with CERCLA/Superfund Amendments and Reauthorization Act (see Installation Restoration Program definition) is funded by the Department of Defense under the Defense Environmental Restoration Act.

**Chemical of Potential Concern (COPC)**—A compound or element identified as a possible source of risk, based upon a comparison between the chemical concentration and established screening levels.

**Environmental Baseline Survey (EBS)**—An environmental assessment conducted by the Navy at bases that have been closed under the Base Realignment and Closure (BRAC) Act.

**Groundwater**—Water found beneath the Earth's surface in soil pore spaces and fractures in geologic formations. When formations yield water in sufficient quantity and quality (i.e., an aquifer), groundwater is often used as a water supply.

**National Priorities List (NPL)**—U.S. Environmental Protection Agency's list of sites for priority cleanup under the Superfund program.

**No Action/No Further Action**—Under CERCLA, if there are no unacceptable risks to human health or the environment at a site, then "no action" is required (i.e., no remediation, monitoring, or land use restrictions, etc.). If remediation is conducted in order to achieve the condition of no unacceptable risk, then the site requires "no further action" under CERCLA.

**Polycyclic Aromatic Hydrocarbons**—Chemical compounds such as benzo(a)pyrene, naphthalene, anthracene, and phenanthrene, which are usually byproducts of incomplete combustion. PAHs can occur naturally (e.g., from forest fires) and as the consequence of human activities.

**Proposed Plan**—A CERCLA document that summarizes the lead agency's (in this case, the Navy's) preferred cleanup remedy for a site and provides the public with information on how they can participate in the remedy selection process.

## Record of Decision Naval Air Station South Weymouth Appendices

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**Record of Decision (ROD)**—A legal, technical, and public document under CERCLA that explains the rationale and final cleanup decision for a site. It contains a summary of the public's involvement in the cleanup decision.

**Removal Action**—A type of short-term cleanup that can be conducted at any time during the CERCLA process to address threats to human health or the environment. Typically, "time critical" removal actions are conducted when it is determined that less than 6 months are available before site activities must be initiated and when the site has less complex or less extensive contamination than sites that would require long-term cleanup. An Action Memorandum is prepared to outline the removal action.

**Responsiveness Summary**—A CERCLA document containing the responses to the formal comments submitted by the public regarding the Proposed Plan. This summary is issued as an appendix to the ROD.

**Review Item Area (RIA)**—A site identified during a Phase I EBS that requires further study for potential contamination.

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File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>1.0 SITE ASSESSMENT</b>									
<b>1.8 Environmental Baseline Survey</b>									
1.8		1.8-1	R	Phase I Environmental Baseline Survey, Naval Air Station, South Weymouth, Massachusetts	11/1996	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
1.8		1.8-2	R	Phase I Environmental Baseline Survey Report Errata for Naval Air Station South Weymouth, MA	11/10/1997	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
1.8		1.8-3	L	[Comments on the] Draft Phase II Environmental Baseline Survey Decision Document for Review Item Area 53, Former Radio Transmitter Building, Naval Air Station South Weymouth, MA	1/31/2001	MassDEP	U.S. Department of the Navy	A.R. File	53
1.8		1.8-4	L	[Comments on the] Draft Phase II Environmental Baseline Survey Decision Document for Review Item Area 53, Former Radio Transmitter Building, Naval Air Station South Weymouth, MA	2/6/2001	EPA	U.S. Department of the Navy	A.R. File	53
1.8		1.8-5	L	Meeting notes.	5/4/2001	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53
1.8		1.8-6	L	Response to January 31, 2001 DEP Comments on Draft Decision Document for RIA 53, Former South Weymouth Naval Air Station (RTN 3-2621)	5/16/2001	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53
1.8		1.8-7	L	Response to February 6, 2001 EPA Comments on Draft Decision Document for RIA 53, Former South Weymouth Naval Air Station (RTN 3-2621)	5/16/2001	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53
1.8		1.8-8	L	Meeting notes.	7/18/2001	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53
1.8		1.8-9	R	Draft (Revision 1) Phase II Environmental Baseline Survey Decision Document for Review Item Area 53, Former Radio Transmitter Building, Naval Air Station South Weymouth, MA	12/23/2002	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53
1.8		1.8-10	R	Phase II Environmental Baseline Survey Field Report, Area of Concern 53 - Former Radio Transmitter Building. Former Naval Air Station (NAS) South Weymouth, Massachusetts	12/2004	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53
1.8		1.8-11	R	Environmental Baseline Survey Phase II Project Memorandum Re: AOC 53 - Former Radio Transmitter Building. Former Naval Air Station (NAS) South Weymouth, Massachusetts	12/8/2004	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53

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## APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>1.9 Work Plans</b>									
1.9		1.9-1	R	Final Phase II Environmental Baseline Survey Sampling Work Plan (Rev. 1)	10/13/1998	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-2	R	Draft Phase II Remedial Investigation Work Plan, South Weymouth Naval Air Station, Weymouth, Massachusetts	11/1998	Tetra Tech NUS	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-3	R	Quality Assurance Project Plan, Phase II Environmental Baseline Survey. (revised)	12/1999	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-4	R	Streamlined Human Health Risk Assessment Work Plan Areas of Concern at NAS South Weymouth, South Weymouth, Massachusetts.	2001	EA	U.S. Department of the Navy	A.R. File	Basewide
1.9		1.9-5	R	Final Work Plan for Review Item Area 53, Former Radio Transmitter Building, Naval Air Station, South Weymouth, Massachusetts	5/21/2001	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	53
1.9		1.9-6	R	Final (Revision 1) Streamlined Ecological Risk Assessment Work Plan, Areas of Concern at Naval Air Station South Weymouth, South Weymouth, MA	4/30/02	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	4A, 4B, 9B, 53, 55A, 55B, 55C, 60, 84, 101
1.9		1.9-7	R	Draft Work Plan for Review Item Area (RIA) 53 (Excavation Within foundation), Limited Removal Action, Former Naval Air Station (NAS), South Weymouth, Massachusetts	8/29/2002	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	53
1.9		1.9-8	R	Work Plan Addendum, RIA 53 Old Mill Stream Hot Spot Excavation, Former Naval Air Station (NAS), South Weymouth, Massachusetts	9/2002	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	53
<b>3.0 REMEDIAL INVESTIGATION</b>									
<b>3.2 Sampling and Analysis Data</b>									
3.2		3.2-1	R	Final Summary Report of Background Data Summary Statistics for Naval Air Station South Weymouth	2/24/00	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
3.2		3.2-2	R	CD-ROM Validation Reports for Phase II EBS NAS South Weymouth, MA	2/2000	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
3.2		3.2-3	R	Errata to the Final Summary Report of Background Data Summary Statistics	3/8/00	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
3.2		3.2-4	R	Supplement to Final Summary Report of the Background Data Summary Statistics for NAS South Weymouth	11/08/02	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide

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## APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)

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<b>3.6 Remedial Investigation Reports</b>									
3.6		3.6-1	R	Final Focused Groundwater Flow Direction Study for the Phase II Environmental Baseline Survey	7/14/00	Stone & Webster (EA)	U.S. Department of the Navy	A.R. File	Basewide
3.6		3.6-2	L	[Comments on the] Draft Closeout Report Action Memorandum for AOC 53 at the South Weymouth Naval Air Station	11/25/2003	MassDEP	U.S. Department of the Navy	A.R. File	53
3.6		3.6-3	L	[Comments on the] Draft Closeout Report Action Memorandum for AOC 53 at the South Weymouth Naval Air Station	11/2003	EPA	U.S. Department of the Navy	A.R. File	53
3.6		3.6-4	L	Response to November 25, 2003 DEP Comments on Draft Closeout Report Action Memorandum for Review Item Area 53, Old Mill Stream Excavation and Excavation within Former Building 33 Foundation, Former South Weymouth Naval Air Station	12/1/2003	Tetra Tech EC	U.S. Department of the Navy	A.R. File	53
3.6		3.6-5	L	Response to November 2003 EPA Comments on Draft Closeout Report Action Memorandum for Review Item Area 53, Old Mill Stream Excavation and Excavation within Former Building 33 Foundation, Former South Weymouth Naval Air Station	12/1/2003	Tetra Tech EC	U.S. Department of the Navy	A.R. File	53
3.6		3.6-6	L	[Comments on the] Final Closeout Report Action Memorandum for AOC 53 at the South Weymouth Naval Air Station	5/12/2004	EPA	U.S. Department of the Navy	A.R. File	53
3.6		3.6-7	L	[Comments on the] Final Closeout Report Action Memorandum for AOC 53 at the South Weymouth Naval Air Station	5/20/2004	MassDEP	U.S. Department of the Navy	A.R. File	53
3.6		3.6-8	R	Final (Revision 1) Closeout Report Action Memorandum for Area of Concern 53, Former Radio Transmitter Building, at the Former Naval Air Station South Weymouth, South Weymouth, Massachusetts [includes responses to regulatory comments on the final (revision 0) report]	6/3/2005	Tetra Tech EC	U.S. Department of the Navy	A.R. File	53
3.6		3.6-9	R	Final (Revision 1) Closeout Report for Area of Concern 53, Former Radio Transmitter Building, at the Former Naval Air Station South Weymouth, South Weymouth, Massachusetts [included as Attachment A of the Closeout Report Action Memorandum of 6/3/2005]	6/3/2005	Tetra Tech EC	U.S. Department of the Navy	A.R. File	53
<b>4.0 FEASIBILITY STUDY</b>									
<b>4.8 Proposed Plans for Selected Remedial Action</b>									
4.8		4.8-1	R	Proposed Plan, AOC 8, 53, Naval Air Station South Weymouth, Weymouth, Massachusetts	6/07	U.S. Department of the Navy	Public	A.R. File	8, 53

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<b>5.0 RECORD OF DECISION</b>									
<b>5.3 Responsiveness Summaries</b>									
5.3		5.3-1	R	Transcript of the Public Hearing on the Proposed Plan for the AOCs 8 and 53 [included as Appendix E of the Record of Decision]	7/19/07	Public	U.S. Department of the Navy	A.R. File	8, 53
5.3		5.3-2	R	Responsiveness Summary (included as part 3, the Responsiveness Summary, of the Records of Decision for AOC 8, 53)	12/07	U.S. Department of the Navy	Public	A.R. File	8, 53
<b>5.4 Record of Decision</b>									
5.4		5.4-1	R	Final Record of Decision, Area of Concern 53 (Parts I & II) Naval Air Station South Weymouth, Massachusetts	12/07	U.S. Department of the Navy and EPA	Public	A.R. File	53
<b>10.0 ENFORCEMENT/NEGOTIATION</b>									
<b>10.16 Federal Facility Agreements</b>									
10.16		10.16-1	L	Federal Facility Agreement for South Weymouth Naval Air Station National Priorities List Site	4/00	EPA	U.S. Department of the Navy	A.R. File	1,2,3,4,5,7, 8,9,10, 11
<b>13.0 COMMUNITY RELATIONS</b>									
<b>13.2 Community Relations Plan</b>									
13.2		13.2-1	R	Community Relations Plan Naval Air Station South Weymouth, Massachusetts	7/98	U.S. Department of the Navy	Public	A.R. File	1,2,3,4,5,7, 8,9
<b>13.4 Public Meetings/Hearings</b>									
13.4		13.4-1		Restoration Advisory Board Workshop Guidebook	7/94	EPA	Public	A.R. File	Basewide
13.4		13.4-2		Public Notice: Availability of the Proposed Plan, and Notification of Public Meeting and Comment Period	7/07	Tetra Tech NUS	Public	A.R. File	Basewide
13.4		13.4-3		Public Notice: Notification of Restoration Advisory Board Meetings (Monthly)	1995-2007	Tetra Tech NUS and EA Engineering, Science, and Technology	Public	A.R. File	Basewide
13.4		13.4-4		Restoration Advisory Board Meeting Minutes (Monthly)	1995-2007	U.S. Department of the Navy	Public	A.R. File	Basewide

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File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>13.5 Fact Sheets/Information Updates</b>									
13.5		13.5-1	R	The Former Naval Air Station South Weymouth Environmental Fact Sheet	2/98	EA Engineering, Science, and Technology	Public	A.R. File	Basewide
13.5		13.5-2	L	Public Notice: Public Information and Public Hearing for the AOC 8 and 53 Proposed Plan	7/07	Tetra Tech NUS	Public	A.R. File	8, 53
13.5		13.5-3	L	Legal Notice, Record of Decision Available For AOC 53	12/07	Tetra Tech NUS	Public	A.R. File	53
<b>13.6 Mailing Lists</b>									
13.6		13.6-1		Community Relations Mailing List: State, Federal and Local Agencies (including Media and Public Libraries)	N/A	U.S. Department of the Navy	N/A	A.R. File	Basewide
13.6		13.6-2		Community Relations Mailing List: Other Parties (e.g., general public) – CONFIDENTIAL (due to potential Privacy Act violations)	N/A	U.S. Department of the Navy	N/A	A.R. File	Basewide
<b>17.0 SITE MANAGEMENT RECORDS</b>									
<b>17.6 Site Management Plans and Reviews</b>									
17.6		17.6-1	R	Site Management Plan Naval Air Station South Weymouth, Massachusetts	10/99	EA Engineering, Science, and Technology	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9
17.6		17.6-2	R	Site Management Plan Revision 1.0 Naval Air Station South Weymouth, Massachusetts	10/00	EA Engineering, Science, and Technology	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9
17.6		17.6-3	R	Site Management Plan Revision 2.0 Naval Air Station Weymouth, Massachusetts	11/01	EA Engineering, Science, and Technology	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9, 10
17.6		17.6-4	R	Site Management Plan Revision 3.0 Naval Air Station South Weymouth, Massachusetts	4/03	EA Engineering, Science, and Technology	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9, 10, 11
17.6		17.6-5	R	Site Management Plan Revision 4.0 Naval Air Station South Weymouth, Massachusetts	12/04	EA Engineering, Science, and Technology	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12
17.6		17.6-6	R	Draft Site Management Plan Revision 5.0 Naval Air Station South Weymouth, Massachusetts	8/05	Tetra Tech NUS	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12



**Record of Decision  
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**APPENDIX D: ADMINISTRATIVE RECORD INDEX (cont.)**

File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>17.6 Site Management Plans and Reviews (cont.)</b>									
17.6		17.6-7	R	Site Management Plan Revision 6.0 Naval Air Station South Weymouth, Massachusetts	10/31/06	Tetra Tech NUS	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 4A, 14, 55D, 83, 8, 53, 60, 61, Hangar 1, 55C
17.6		17.6-8	R	Site Management Plan Revision 7.0 Naval Air Station South Weymouth, Massachusetts	09/07	Tetra Tech NUS	U.S. Department of the Navy	A.R. File	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 4A, 14, 55D, 83, 8, 53, 60, 61, Hangar 1, 55C

**NOTES:**

(a) R = Report; L = Letter.  
AOC = Area of Concern  
A.R. File = Administrative Record File  
EBS = Environmental Baseline Survey  
EFANE = (Navy) Engineering Field Activity Northeast  
EPA = (U.S.) Environmental Protection Agency (Region 1)  
MassDEP = Massachusetts Department of Environmental Protection  
N/A = Not Applicable  
NAS = Naval Air Station  
RIA = Review Item Area

**Record of Decision  
Naval Air Station South Weymouth  
Appendices**

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**APPENDIX E: TRANSCRIPT OF PUBLIC HEARING ON THE PROPOSED PLAN  
FOR AOC 53**

Refer to attached copy.

PUBLIC HEARING

Area of Concern 4 A

Area of Concern 55D

Area of Concern 8

Area of Concern 53

Naval Air Station South Weymouth  
Weymouth, MA

July 19, 2007

8 p.m.

NAS South Weymouth, MA

*Leavitt Reporting, Inc.*

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P R O C E E D I N G S

MS. ROBERTS: We are officially going to begin with the public hearing. And just so that people know how this process runs, this is the formal process. So what will happen is this is an opportunity for you to make your comments, ask questions, and they will be formally recorded in the record. Those will appear in the Responsiveness Summary that is part of the Record of Decision.

So when you have your comment, we're going to take you one at a time, just say your name and then your comment or your question. They'll be recorded. Just keep in mind that during public hearings your questions are not answered. Your answers will be part of the Responsiveness Summary.

VOICE: Will we all get a responsiveness summary of who gave questions or comments?

MR. BARNEY: Yes. Everybody who makes a written or an oral comment will get a copy of the Responsiveness Summary.

MS. ROBERTS: Just so that we're clear, the comments or the questions are related to the

1 floor presentation. So we'd like to stay on topic.

2 MR. GALLUZZO: Before we start, what is  
3 the timeframe from this process to a response?

4 MS. ROBERTS: Great question. Does  
5 somebody want to answer that?

6 MR. BARNEY: I'll go through the  
7 structure of the process. Roughly 30 days after the  
8 close of the comment period we'll submit a draft  
9 Record of Decision to the agencies for review.  
10 They'll have 30 days to review that, send us our  
11 comments or send us their comments. We'll work to  
12 resolve those comments and send them a draft final  
13 Record of Decision, and the Responsiveness Summary  
14 is a part of that. They'll look at those for a  
15 period of time and hopefully we can reconcile within  
16 30 to 60 days and furnish a final Record of  
17 Decision.

18 So did you add up all those 30s?

19 VOICE: Looks like February.

20 MS. CALL: I think it's December we  
21 expect, we hope.

22 MR. BARNEY: Between 4 and 6 months.

23 MS. ROBERTS: Harvey.

1 MR. WELCH: So that would be about 4 or  
2 6 months for that West Gate Landfill from now? If  
3 it was closed July 6th, comment period.

4 MR. BARNEY: If it takes us that many  
5 iterations to get through, perhaps we can cut down  
6 the iteration effect between the Navy, the agencies,  
7 on the elements of the Record of Decision.

8 MR. CHAFFIN: Maybe briefly mention the  
9 comment period for these as proposed.

10 MR. BARNEY: Yes. The period closes  
11 August 1st.

12 MR. CHAFFIN: You can write your  
13 comments, if you're not comfortable doing it orally  
14 tonight, there is a place in the Proposed Plan, a  
15 form you can use.

16 MS. ROBERTS: Yes, you can do both. If  
17 there is something you remember after tonight's  
18 forum, always go ahead and submit them in writing as  
19 well.

20 MR. BARNEY: It closes August 1st. We  
21 usually wait 3 to 4 days after that for the mail to  
22 come in.

23 MS. ROBERTS: So who would like to

1 start? Dave, do you have anything you would like to  
2 start with?

3 MR. BARNEY: I would like to thank  
4 everyone for coming, and I appreciate the comments  
5 we heard earlier, and if I hadn't addressed any of  
6 those sufficiently, please readdress those here  
7 tonight and compel us to come back with a new  
8 response or alternate response.

9 MS. ROBERTS: Harvey.

10 MR. WELCH: Harvey Welch from Weymouth.  
11 I would like to know why they are just starting to  
12 test what you said on mice these combinations of  
13 toxic chemicals to get an accurate assessment of how  
14 it's affecting children and adults, people. How can  
15 you make a good judgment decision when -- what  
16 amazes me, you're just starting this now, and how  
17 can you make a good judgment decision on these sites  
18 with the cocktail of chemicals that are on there  
19 when you really don't know what this -- I know you  
20 talk about adding up things, but I'm talking about  
21 literally doing tests with these toxic chemicals on  
22 mice which you said they just supposedly started  
23 doing, which is amazing to me. In other words how

1 can you make a good judgment on not doing those  
2 tests? That's my question.

3 MS. ROBERTS: All right.

4 MR. CUNNINGHAM: James Cunningham from  
5 Weymouth. First of all I would like to know if  
6 you're taking these, first the Area 4 A and so forth  
7 and then later Area 8 and 53, or are you taking them  
8 all at one time?

9 MR. BARNEY: All at one time.

10 MR. CUNNINGHAM: On the Area 4 A, the  
11 abandoned septic system, I have concerns with the  
12 words, the only area of potential unaccessible --  
13 unacceptable risk at AOC 4 A was the wetland west of  
14 the site. That word potential to me is kind of a  
15 weasel word, and I'm really concerned about the  
16 welfare of animals and the environment. And I'm  
17 concerned that the animals may be subject to some  
18 sort of pollution that will harm them.

19 I'm also concerned that the developer  
20 will probably fill in some wetlands and use these  
21 places for buildings and that they may be  
22 contaminated then. So I'm concerned about wetlands  
23 in general. In all of these four sites I am



1 concerned about the wetlands and the possible effect  
2 on the animals and flora and fauna in the area.

3 Also on Site 4 A the septic tank, I'm  
4 concerned that it is possible that the septic tank  
5 could rot out and become a sink hole or become some  
6 sort of a hazard and could fill up with some kind of  
7 water and become just another little sewage pond.  
8 So I believe that the septic tank should be removed,  
9 especially when you consider the requirements under  
10 Title V. And perhaps also the distribution box.  
11 And I am concerned that it's so close to the  
12 wetlands and that materials from the septic tank  
13 could have gone into the wetlands.

14 Again, I am concerned about the  
15 environmental or natural environment of this area  
16 and the animals and plants that it supports. So I  
17 would like to see that tank removed, and I would  
18 like to make sure that the animals don't get injured  
19 and the people who live nearby after the places are  
20 built out also don't get any injurious results.  
21 Thank you.

22 MS. ROBERTS: Anyone else. Yes.

23 MR. WELCH: This has to do with the

1 actual presentation pamphlet that you handed out. I  
2 have been asking this, Dave, I don't know, I know I  
3 talked to you about this, of having a map of the  
4 base with the roads surrounding the base on it so  
5 people can see where they are living, and they can  
6 match it up to where they are near the base. Do you  
7 understand what I'm saying?

8 MR. BARNEY: Absolutely.

9 MR. WELCH: And even in this  
10 presentation you look at, you see a block basically  
11 which is what we have been looking at since we  
12 started, with no streets around it. It's like,  
13 always like it's planted here from outer space, and  
14 you have no streets around it. It should have  
15 streets around it so people can get an idea of where  
16 West Gate Landfill is. They could be living up the  
17 street from it. They don't know that because it's a  
18 blob on a map. You can't picture it if you have no  
19 orientation. That's the word I'm looking for,  
20 orientation on this map. You can't do that. That  
21 makes a big difference. And how come we can't do  
22 that? I don't think that's so hard to do. Why  
23 can't we do that? Is there a reason?

1 MS. ROBERTS: Thank you.

2 MR. WELCH: I'm just asking.

3 MS. ROBERTS: Can't answer for the  
4 public hearing.

5 MR. WELCH: I'm sorry. That's a  
6 question.

7 MS. ROBERTS: After the hearing is over  
8 he might be able to answer that.

9 MR. SCANNELL: Peter Scannell of  
10 Weymouth, Mass. We all feel extremely uncomfortable  
11 when we hear about acceptable levels of some of the  
12 SVOCs and so forth found, to say that there is no  
13 further action will be taking place in areas where  
14 PCBs, thallium, benzos and so on so forth,  
15 extraordinarily dangerous, in name, exist. And to  
16 know very well that not only is no action going to  
17 be taken, and because of cost restraints and so  
18 forth, and assume public contact with those areas  
19 would be minimal or whatever the risk assessment  
20 analysis use is acceptable. Again, that is our  
21 concern. Pardon me, that is my concern. I know for  
22 sure that nobody has to this day said no. As a  
23 matter of fact of course we're going to make sure

1 that people are aware of these various areas and in  
2 a historical nature.

3 I understand it was said tonight that  
4 we do not in the Superfund world rely on history.  
5 We understand quite well that's because of  
6 liability. So these are all the things that deeply  
7 concern us tonight, and we understand, again as  
8 we've talked, that the carcinogenic risk assessment  
9 does not take into consideration MS, soft tissue  
10 diseases, and so forth and so on. As this gentleman  
11 just said, combinations of elements.

12 We are just beginning to tackle that  
13 science. And it was very succinctly said here  
14 tonight that we are using the best science we have  
15 available. I absolutely believe that of this board  
16 and of the Navy. And I applaud them for using that,  
17 and I know it's extraordinarily expensive. At the  
18 same token, knowing very well there will be better  
19 science in the future and knowing the nature of  
20 these particular chemicals in these areas, it's just  
21 the part that irks the heck out of me is that we're  
22 not addressing that they are here.

23 How do we live with them? There is no

1 pamphlet for the people that are going to be lured  
2 to Southfield on how to live in a Superfund site or  
3 among Superfund sites or remediated Superfund sites.  
4 Children, little Johnny going in the water. It was  
5 said here tonight that you'd show no precaution to  
6 your grandchild or daughter if you decided to go  
7 into the wetland looking for turtles knowing very  
8 well what is there. I greatly doubt that. I think  
9 you'd probably get a little nervous when she was  
10 bringing her hand to her mouth repeatedly. And that  
11 would be justified. And it's just that knowledge.  
12 People deserve to have that knowledge or else nobody  
13 would buy it. That is the concern.

14               So again, full disclosure. The nemesis  
15 of firms like LNR, read their history and so forth.  
16 That is our concern. Your findings I absolutely  
17 applaud the tenacity, perseverance, level of  
18 integrity that's been brought and what has been  
19 found, and you are hamstrung in that you are given  
20 benchmarks and you don't dictate these acceptable  
21 levels. These are the things that you're supposed  
22 to work within knowing full well that they are not  
23 perfect, and that's understandable, but precautions

1 that are not being taken that are so easy to do and  
2 that knowing South Shore Tri Town has never once  
3 addressed them and as a matter of fact wants to  
4 create an orchard environment to beckon people to  
5 this base knowing what is in here is extraordinary.  
6 Thank you.

7 ANN HILBERT: Ann Hilbert, North  
8 Weymouth. I'm concerned about what I heard tonight.  
9 I asked about the health study, and the Navy is  
10 relying on the Department of Environmental Affairs.  
11 I have been around a while so I'm familiar with the  
12 politics in Massachusetts. Why is the Navy  
13 depending on them? Why don't they come in and do  
14 their own assessment. This is going to live in  
15 infamy if this isn't done right.

16 MS. RAKERS: Joanne Rakers. I have  
17 been coming for many years here and every time you  
18 send us something I learn a little more. I was just  
19 reading through the AOC, the 55 D, and every time  
20 I've ever asked questions about compounds or  
21 mixtures, how you know that it's toxic or not. What  
22 level, like I asked before, what would arsenic be  
23 for in water, arsenic out of water. What would it

1 be, the level that we can go after and say this  
2 level is higher than the normal level that it should  
3 be at.

4 In here I was reading semi-volatile  
5 stuff you have in here, and you say they were fine  
6 but one sediment example was over the screening  
7 level. What is over the screening level? I need to  
8 find out exactly what each thing is toxic to or not  
9 toxic to. You have tons of it here. It says  
10 pesticides exceeded benchmark screening levels in  
11 both soil and water. How high was it? I would like  
12 to know how to figure it out myself. I mean I go  
13 through these, benzene, everything in here that is  
14 very toxic. All of a sudden you give us different  
15 categories like one of benzo, you said it's 0.056.  
16 ug-L. What does that basically mean? It's too high  
17 or too low or it's okay, but if it's mixed with  
18 another chemical, at which I missed the program this  
19 morning, sorry I missed most of it, but every time I  
20 go through these it says within the range or over it  
21 exceeds. If it over exceeds that means there is  
22 something wrong with it. Why isn't it cleaned up  
23 all the way?

1           It can leak. You are capping all these  
2 things that do leak. We understand that. But why  
3 do we have to wait for it to leak again for you to  
4 fix it? It is our kids' lives that are there.

5           The rubbish disposal area, we know  
6 there is all kinds of crap in there running into the  
7 Swamp River and into our water system, but nobody  
8 has the guts to tell us what it is or what the  
9 process is to clean it. We should be able to know  
10 what's in it. And you make the statements it's over  
11 above the level of DEP's evaluation of it. We have  
12 got to know exactly what it was. I would love to  
13 find out everything you have in here that gives you  
14 the examples of DDT. It's 0.035, ug-L. How high  
15 does DDT have to be before it hurts somebody?

16           I just think you need not to cover this  
17 up, just clean it as best you can and let us live  
18 half a decent life with our children. If not, I  
19 wouldn't let my child come here and sit in a field  
20 with a fence around it. I would not and I don't  
21 think half of you would too. Jim Cunningham brought  
22 this up years ago. Oh, Joanne, it's fine. They're  
23 going to put a gate around it. No one is going to



1 go in it. But would he come with his grandchild and  
2 sit in the middle and have a picnic with his kids?  
3 No.

4 And to have this statement and bunch of  
5 stuff we're going through all these years, putting a  
6 fence is not going to stop a child from climbing  
7 over if you put a sign on it. I'd just love to  
8 clean it up, clean it so we can start anew in  
9 Weymouth. That's all I ask.

10 MR. SMART: Michael Smart from  
11 Weymouth. First I just want to comment on AOC 8 and  
12 53. Just to follow up on one of the comments made  
13 earlier, just to thank the Navy for their hard work  
14 on those particular two sites with over 3 million  
15 pounds of soil removed over a number of years from  
16 2001 right through 2005 in checking it and  
17 monitoring it. I think you did a thorough job on  
18 those two sites there.

19 However, on the other two sites on 4 A  
20 and 55, I would have to agree with Mr. Cunningham  
21 with regard to the septic tank on 4 A with having  
22 everything removed, and I as well have been coming  
23 here for a number of years and commenting. And Dave

1 I think you know, my usual take on things that were  
2 not here prior to 1940 that everything should be  
3 removed with regard to the sediments in the wetland  
4 area on 4, 55 and 4 A. PCB levels everything should  
5 be removed. In my opinion, I've said it at every  
6 single Record of Decision, every single public  
7 hearing, all that material should be removed in my  
8 opinion regardless of the level. And none of that  
9 stuff was here. I understand baseline survey and I  
10 understand PCB in the air base from the number of  
11 meetings I've been to, but things that were here  
12 prior to the Navy taking the property with regard to  
13 electrical equipment, transformers, and the antenna  
14 field and everything out there, I would think that  
15 everything should be removed including the areas in  
16 the wetlands on both 4 A and 55. Thank you.

17 MS. ROBERTS: Yes.

18 MR. GALLUZZO: Dominic Galluzzo of  
19 Weymouth. I have to agree with Mr. Smart's  
20 comments. I'm disappointed at this point that after  
21 tonight's presentations we come to realize that  
22 almost two-thirds or better than two-thirds of this  
23 footprint is ready for transfer with so little

1       contamination of concern and that the risk  
2       assessments to humans is so low. This base was  
3       active when environmental concerns were primitive  
4       compared to today. I just as one individual become  
5       increasingly more skeptical as to the cleanliness of  
6       the land that the reuse plan says there is going to  
7       be a densely populated reuse plan. Thank you.

8                       MS. ROBERTS: Any other comments? This  
9       concludes our public hearing. Thank you for coming.  
10      Thank you for your time.

11                     Dave, do you want to say anything else  
12      before we close?

13                     MR. BARNEY: The sentiment that I  
14      appreciate people taking the time out of their busy  
15      lives to come here and express their opinions.  
16      Thank you.


17                     (The proceedings adjourned  
18                     at 8:41 p.m.)  
19  
20  
21  
22  
23

## C E R T I F I C A T E

STATE OF MASSACHUSETTS )

COUNTY OF NORFOLK )

I, CAROL DiFAZIO, do certify that I am a Registered Professional Reporter of the State of Massachusetts, that the said proceeding was recorded stenographically by me, thereafter under my direction transcribed into computer-assisted transcription, and that the foregoing transcript constitutes a full, true, and correct report of the proceedings to the best of my ability, which then and there took place.

  
CAROL DiFAZIO  
Registered Professional Reporter